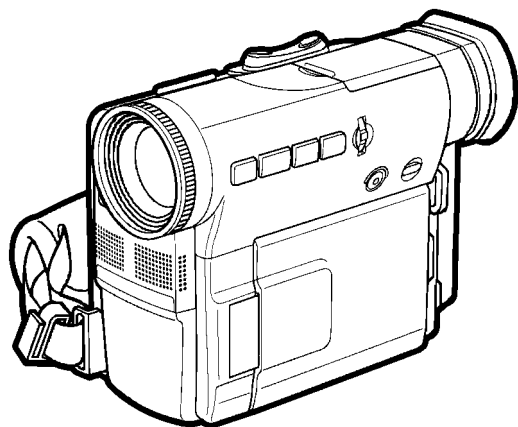


SHARP SERVICE MANUAL

S60D2VL-PD3AS

LIQUID CRYSTAL DIGITAL CAMCORDER PAL



MODELS VL-PD3AS VL-PD3AH VL-PD3AE

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

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1. SPECIFICATIONS

Signal System: PAL standard
 Recording System: 2 rotary heads, helical scanning system
 Cassette: Digital VCR Mini DV video cassette
 Recording/Playback Time: 90 minutes (DVM60, LP mode)
 Tape Speed: SP mode: 18.831 mm/second
 LP mode: 12.568 mm/second
 Pickup Device: $\frac{1}{3}$ " (8.5 mm, effective size: 6.0 mm) CCD image sensor (with approx. 770,000 pixels including optical black)
 Lens: 10 × power zoom lens (F1.4-3.0, f=4.7-47 mm), full-range auto focus, manual focusing possible
 Lens Filter Diameter: 30 mm
 Monitor: 2.5" (6.3 cm) full-color LCD screen
 Minimum Illumination: 4 lux* (F1.4, with gain-up and digital zoom off)
 Video Output Level: 1.0 Vp-p 75-ohm unbalanced
 Audio Output Level: – 8 dBs, impedance less than 2.2 kohms
 Speaker Output: 300 mW
 Power Requirement: DC 7.4V
 Power Consumption: 3.9 W (during camera recording using the viewfinder in full auto mode with zoom motor off)
 4.7W (during camera recording using the LCD screen in full auto mode with zoom motor off and backlight in normal mode)
 Operating Temperature: 0°C to +40°C
 Operating Humidity: 30% to 80%
 Storage Temperature: – 20°C to +60°C
 Dimensions (approx.): 70 mm (W) × 98 mm (H) × 128 mm (D) without protruding parts
 Weight (approx.): 520 g (without battery pack, lithium battery and video cassette)

AC Adapter/Battery Charger (UADP-0321TAZZ)

Power Requirement: AC 110-240 V, 50/60 Hz
 DC Output: 7.3 V
 Power Consumption: 23 W
 Dimensions (approx.): 69 mm (W) × 43 mm (H) × 113 mm (D)
 Weight (approx.): 160 g

Battery Pack BT-L221

DC Output: 7.4 V
 Dimensions (approx.): 40 mm (W) × 25 mm (H) × 53 mm (D)
 Weight (approx.): 79 g

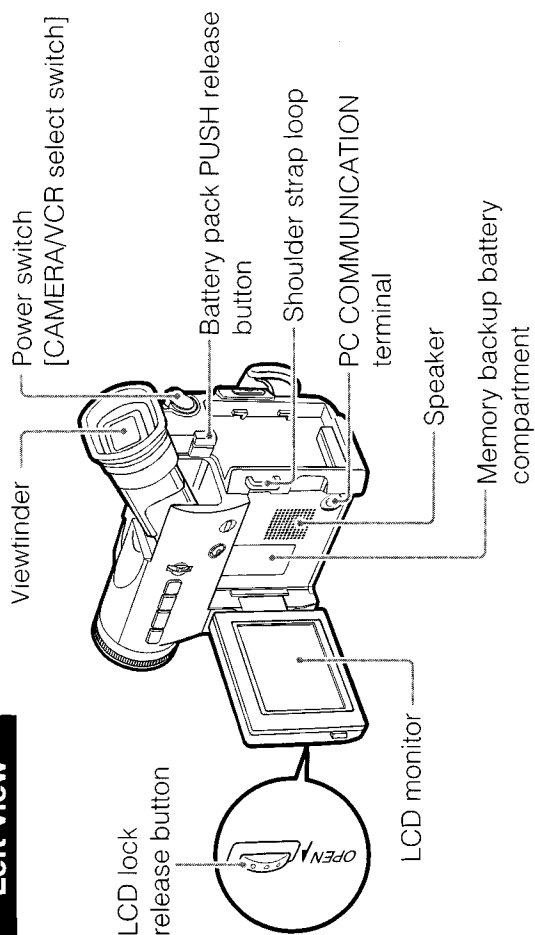
Specifications are subject to change without notice.

*Minimum illumination: Since there is no widely accepted testing procedure for determining minimum illumination capability, lux ratings are comparable only between models from the same manufacturer.

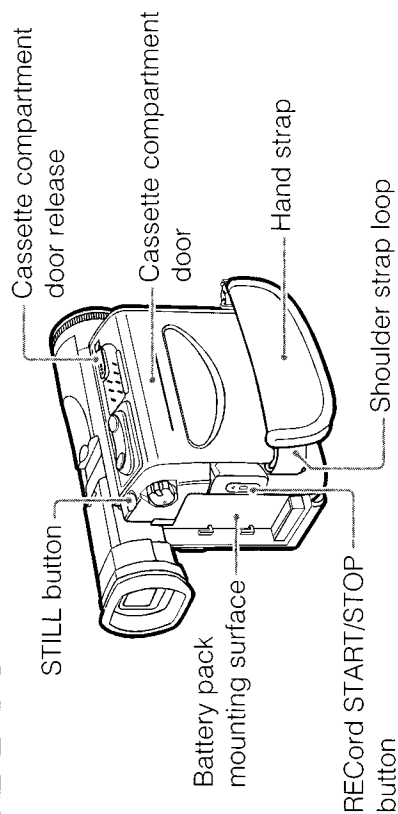
2. PART NAMES

For details on the use of each control.

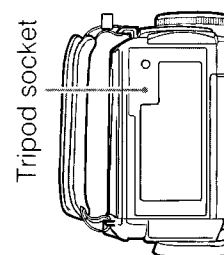
Left view



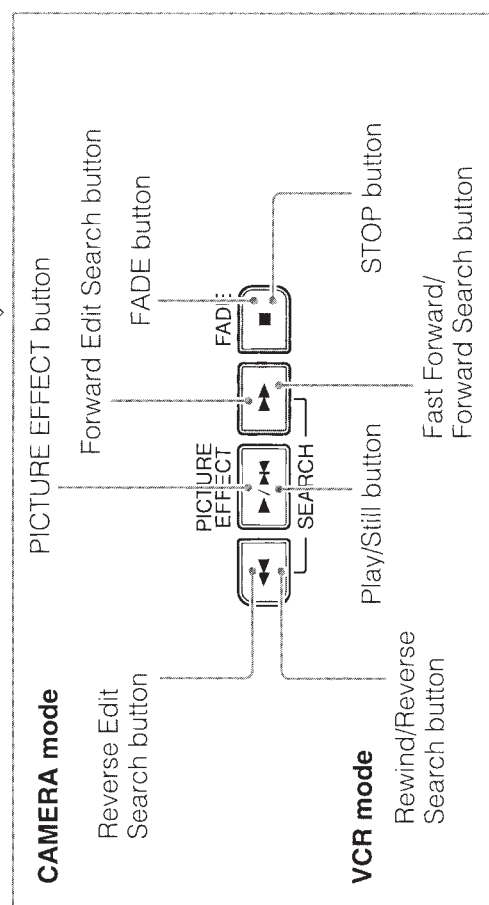
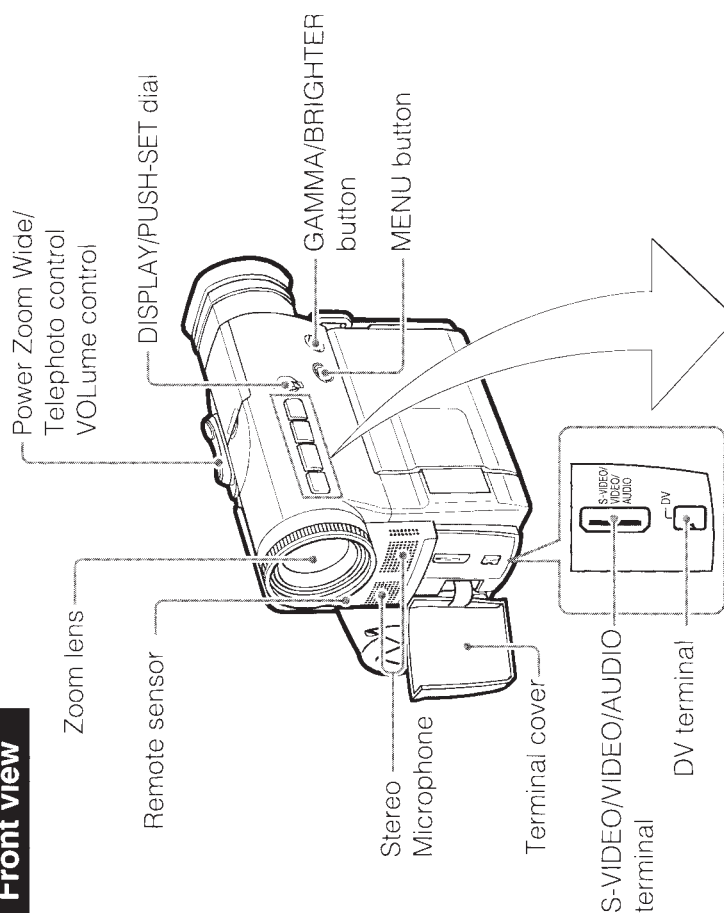
Right view



Bottom view



Front view

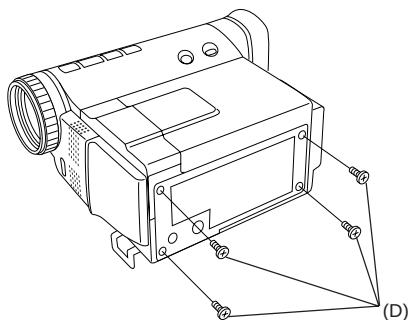


3. DISASSEMBLY OF THE SET

Note:

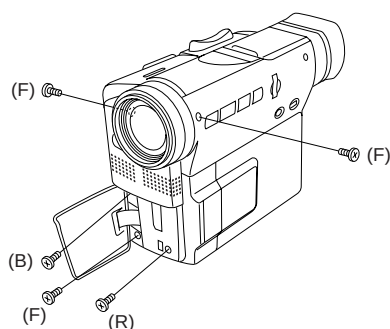
Before removing the cabinet, turn off the power supply, and ascertain that the battery have been removed.

1.



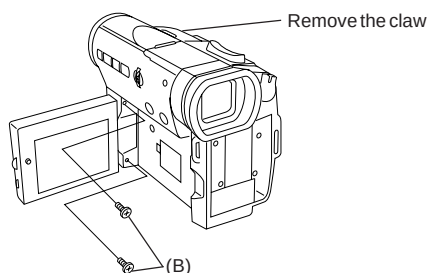
- Remove the screws ((D)XiPSF17P03000)(4pcs.) of the bottom cover and them.

2.



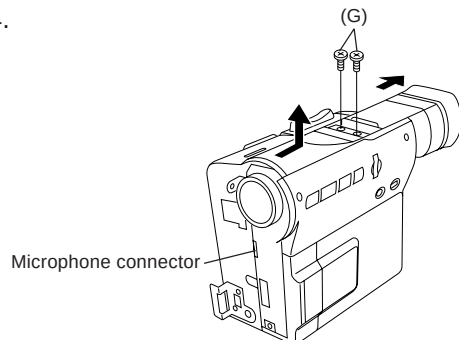
- Remove the screws ((F)XiPSN17P04000)(3pcs.), ((B)LX-HZ0050TAFN)(1pc.) of the front cover and the DV terminal's screw ((R)XiPSN16P05000)(1pc.).

3.



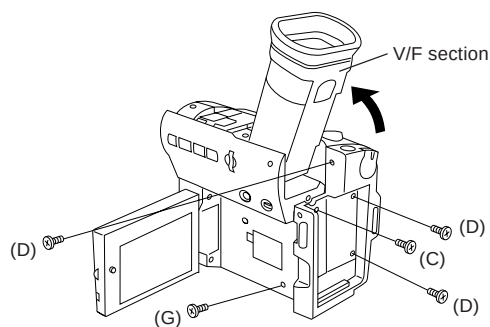
- Open the LCD panel, remove the screws ((B)LX-HZ0050TAFN)(2pcs.), the claws what is connected the cabinet A and remove the front cover.
Be careful so that not damage the lead wires of microphone when it removes the front cover.

4.



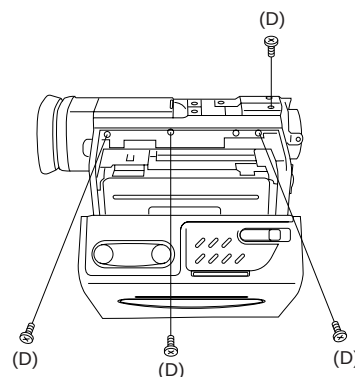
- Slide the section of V/F, and remove the plate of topside, the screws ((G)XiPSN17P03000)(2pcs.), and remove the top cover what is slid toward V/F slide.

5.



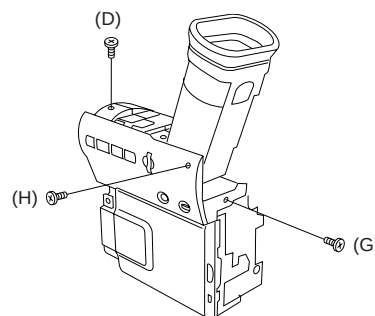
- Up the section of V/F, and remove the screw ((D)XiPSF17P03000)(1pc.).
- Remove the screws ((D)XiPSF17P03000)(2pcs.) and ((C)XiPSF1704000)(1pc.).
- Remove the screw ((G)XiPSN17P03000)(1pc.) and battery cover.

6.



- Remove the screw ((D)XiPSF17P03000)(1pc.) of topside and open the cassette compartment door, remove the screws ((D)XiPSF17P03000)(3pcs.) of both sides and center screws. Remove the Remote control receiver unit connector, the Zoom FPC, the EJECT switch connector, the H/A connector, and the cabinet A.

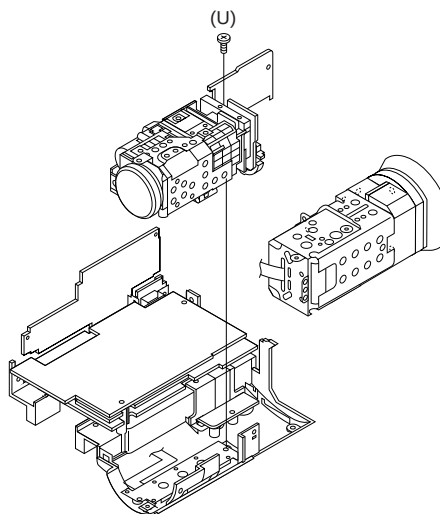
7.



- Remove the screw ((D)XiPSF17P03000)(1pc.) topside of cabinet B and the screws ((H)XiPSN17P02000)(1pc.) of side surface and ((G)XiPSN17P03000)(1pc.) of rear surface.

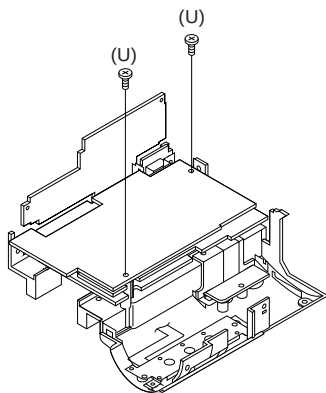
(Note.) In case of disassemble or assemble the section of V/F, do the work with great care that there are never taint or intermix of dust.

8.



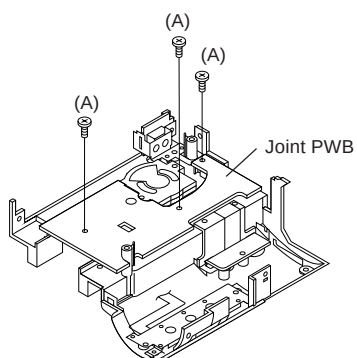
- Remove the screw ((U)LX-HZ0013TAFF)(1pc.) fixed the jogholder and the lens unit.
- Remove the connector of main P.W.B. and remove to lift V/F unit.

9.



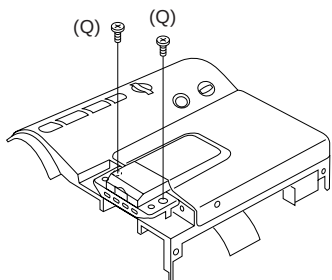
- Remove the screws ((U)LX-HZ0013TAFF)(2pcs.) and VCR PWB.

10.



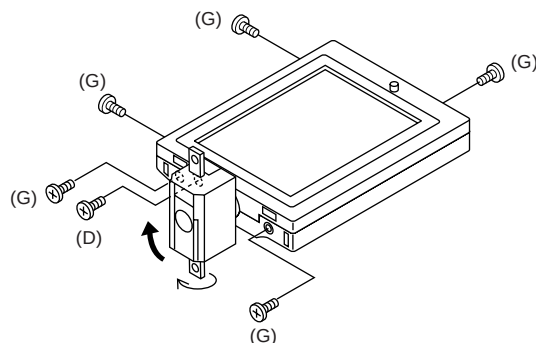
- Remove the screws ((A)LX-HZ0050TAFF)(3pcs.) and joint PWB.

11.



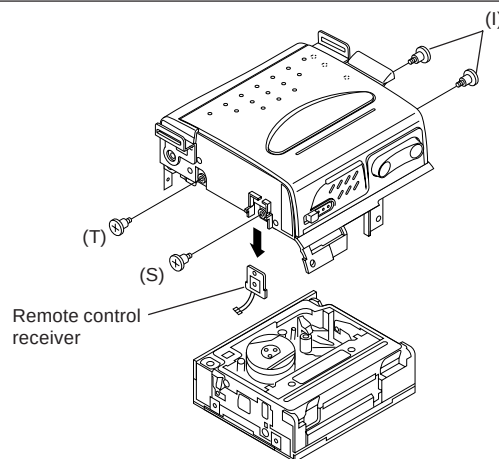
- Remove the LCD tilt fixing screws ((Q)LX-HZ0017TAFF)(2pcs.) and LCD cabinet unit.

12.



- Turn to a right angle the shaft of the LCD tilt unit section, turn the LCD tilt unit and it is perpendicular to the LCD cabinet.
- Remove the fixing screws ((G)XiPSN17P03000)(5pcs.), ((D)XiPSF17P03000)(1pc.) and LCD cabinet.

13.



- Remove the floating screws ((I)LX-BZ0032TAFD)(2pcs.), ((S)LX-BZ0225TAFF)(1pc.) and ((T)LX-BZ0231TAFE)(1pc.) and mechanism section .

<Screws>

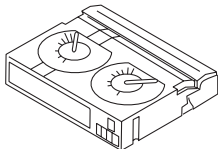
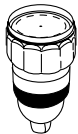
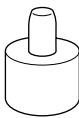
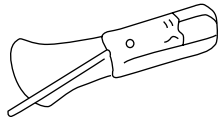
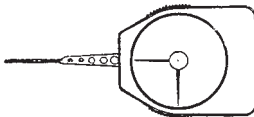
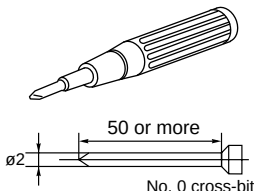
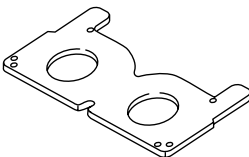
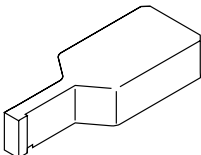
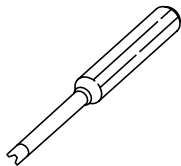
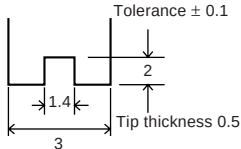
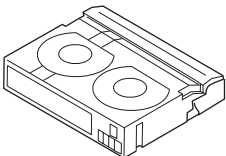
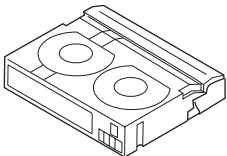
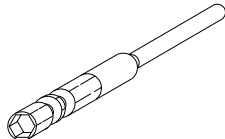
A	LX-HZ0050TAFF	M1.7×4 Black
B	LX-HZ0050TAFN	M1.7×4 Silver
C	XiPSF17P04000	M1.7×4 Black
D	XiPSF17P03000	M1.7×3 Black
F	XiPSN17P04000	M1.7×4 Silver
G	XiPSN17P03000	M1.7×3 Silver
H	XiPSN17P02000	M1.7×2 Silver
I	LX-BZ0232TAFD	Floating screw B
Q	LX-HZ0017TAFF	M2×8 Black
R	XiPSN16P05000	M1.6×5 Silver
S	LX-BZ0225TAFF	Floating screw Black
T	LX-BZ0231TAFE	Floating screw A Silver
U	LX-HZ0013TAFF	M1.7×6 Black

4. MECHANISM ADJUSTMENT JIGS AND PARTS

4-1. Mechanism check adjustment jigs

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

<Note: The entries of list>

 1. PB-use cassette Torque meter 2. 9DASD-1015 3. DB * SD-1015	 1. Torque gauge 2. JiGTG0045 3. CN * For use in VS-REW winding torque measurement.	 1. Torque gauge head 2. 9EQTGH-DH5000 3. BW * For use with the above torque gauge.	 1. Tension gauge 4N 2. JiGSG0400 3. BK * For measurement of pinch roller pressure.	 1. Dial tension gauge 2. 9DAPTG-10-10W 3. CA * PTG-10
 1. Torque screwdriver 150mN·m 2. JiGTD1500RTDH 3. CB	 1. Master plane 2. 9EQMP-VLPD1 3. CL * For checking reel base height.	 1. Height adjustment jig 2. 9DAHG-PD1 3. BZ * For height adjusting.	 1. Height adjustment screwdriver 2. 9EQDRIVER-DH5 3. BC * For guide roller adjustment.	* For Tu guide adjustment. * For T roller adjustment. * Bit shape (see figure below). 
 1. Alignment tape - (I) 2. VR3-GAZXS 3. CF * For tape running adjustment.	 1. Alignment tape - (II) 2. VR3-JPZQS 3. CG * For SW point adjustment. * 90ADV-C-TAPEPAL can use, too. (Code CU)	 1. For hexagon nut opposite side 3mm bit. 2. 95CM22001 3. BL * For S guide hexagon nut installation.	<Miscellaneous> (1) Slide caliper (2) Precision screwdrivers (Phillips head and slotted) (3) Radio needle-nose pliers (4) Tweezers	

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

4-2. Parts for regular periodic inspection and maintenance

<Note: The entries of list>

1. Oil Cosmo Hydro HV22 2. HV22 : 9EQ-Oil-HV22 3. HV22 : AE * Cosmo Petroleum K.K.	1. Cleaning paper 2. JiGDUSPER 3. AP * DUSPER Σ (SIGMA) (ozu Co., LTD.)	1. Grease: Moly Coat YM-103 2. 99FGREASE-YM103 * Dow coaning 1. Screw lock (1401B) * Three Bond	1. Cleaning liquid: industrial-use ethyl alcohol * Commercially available item 1. Extremely thin cotton swab * Commercially available item
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<How to make jigs for mechanism checking and adjustment>

(1) Reel hub for back tension measurement (Fig. 1)

1) Obtain a commercially available cassette tape reel hub.
(Disassemble the cassette tape and remove the tape from the reel hub.)

2) Paste one end of a string (about 20cm long) to the reel hub with (for example) cellophane tape.

3) Paste the weight of about 0.21N on the upper side reel hub.

(2) String for use in pinch roller snap-fit force measurement (Fig. 2)

1) Obtain an approximately 20cm length of commercially available string.

2) Tie the 2 ends together to form a loop.

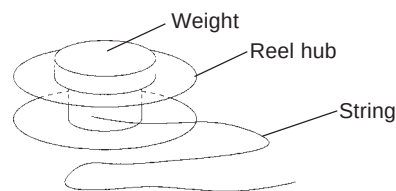


Fig. 1



Fig. 2

5. INSPECTION AND MAINTENANCE ITEMS AND INTERVALS

In order to keep the mechanical section always in good condition, perform the following inspection and maintenance at regular intervals. In addition, after repair, perform the following maintenance items regardless of how long the user has been using the unit.

5-1. List of inspection and maintenance items

○... Replace. □... Clean. △... Lubricate. ★... Check.

	Inspection and maintenance location	Time of use (h)					Symptoms that indicate need for maintenance	Remarks
		500	1,000	1,500	2,000	3,000		
Tape running system	Tape running section (see section 7-3)	□	□	□	□	□	- Block-type noise - Head hole clogging - Tape damage	Note: Replace the drum ass'y if the video head is cleaned but the envelope still does not appear. (When the envelope is normal, refer to "10. USEFUL TIPS".)
	Drum section, Video head (see section 7-3)	□	□	□	□	□		
		<Rollers> • Replace if there is anything abnormal in the rotation, or if there is run-out (that becomes large). <Other than the above> • Clean the section that contacts the tape (especially the lower drum helical section). Use the specified cleaning liquid.						
Drive system	Timing belt	—	★○	—	★○	★○	- The tape fails to run. - The tape becomes slack. - Block-type noise - Abnormal noise	• Replace if there is anything abnormal.
	Pinch roller	□	□	□	□○	□		
	Capstan motor	—	○	—	○	○		
	Swing arm S reel base, Tu reel base	—	★○	—	★○	★○	• Abnormal noise	• Lubricate with oil. [Oil] Cosmo Hydro HV22 Note: Apply oil to the shaft, then wipe lightly with a cloth.
	Center pulley shaft Intermediate pulley shaft Swing arm boss Intermediate gear A shaft, Intermediate gear B shaft	—	△	—	△	△		
	Loading motor Mode switch	—	★○	—	★○	★○		
Performance checks	Abnormal noise	★	★	★	★	★	- The tape fails to run. - The tape becomes slack. - Tape damage - The play-back image is abnormal.	• Replace any part that fails to perform within the standard.
	PB · VS/REW winding torque	—	★	—	★	★		
	PB · VS/R · loading back tension	—	★	—	★	★		
	Tu reel base ratchet torque S reel base no-load torque	—	★	—	★	★		

[Oil] Cosmo Hydro HV22

[Grease] Moly Coat YM-103

[Screw lock] Three Bond 1401B

[Cleaning liquid] Industrial-use ethyl alcohol

5-2. Precautions

- When replacing any part, always replace the cut washer that was removed with a new one.
- This mechanism does not have control adjustment. If the control cannot be set as required, clean and or replace parts.
- On the oil
 - Always use the specified oil. (Using another kind of oil can cause various kinds of trouble.)
 - Always use clean oil, without any mixed-in dirt, to lubricate bearings. (Using oil with dirt mixed in can cause the bearings to wear or to stick.)
 - One drop of oil is the amount shown in the Fig. 1, on the point of a pin.
- Perform circuit repair, tape running adjustment, etc. with the cassette controller assembly attached to the mechanism.
- When operating the mechanism separately, apply voltage to the loading motor. However, the terminal voltage must be DC3V or less. (When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause a trouble.) (Forcing the gears to turn by hand entails danger of breakage.) If the mechanism is separated from the unit, the capstan motor may rub and be damaged if spacing under the mechanism is inadequate.
- To install the cassette controller, push section A in the Fig. 2. Do not push anything else.
- Do not deform any of the mechanical parts.

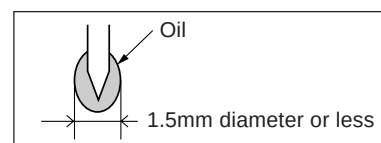


Fig. 1

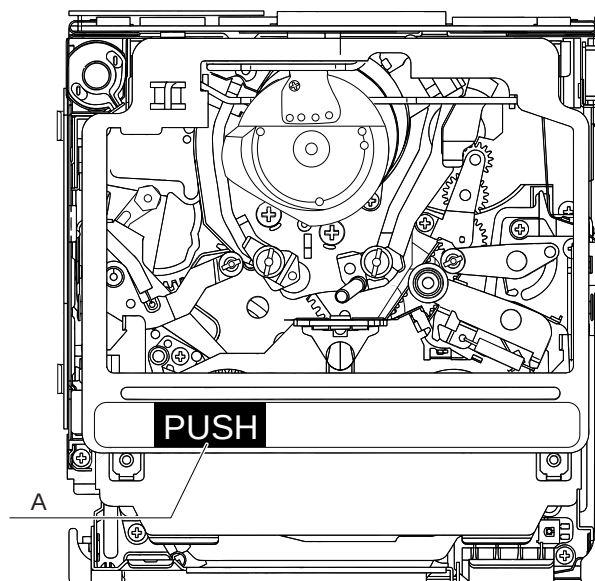


Fig. 2

6. MECHANICAL ADJUSTMENTS AND CHECKS

The items discussed here relate to general on-site servicing (field servicing). Adjustments and replacements that require sophisticated facilities, jigs and technology are omitted.

In addition, in order to maintain the characteristics that the unit has when it is new, not only are inspection and maintenance necessary, but it is absolutely necessary that, for example, the tape not be damaged, and always use jigs for adjustments that require them.

<Precautions>

(1) Always set the power supply and state of the unit as follows Notes for mechanism adjustments and checks.

AC adapter used, with cassette controller assembly

AC adapter used, without cassette controller assembly (Independent Mechanism)

DC3V, without cassette controller assembly (Independent Mechanism)

- (2) When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause a trouble.
 (3) Always run the tape with the cassette controller assembly attached.

6-1. Checking the playback (recording) winding torque AC adapter used, with cassette controller assembly

- (1) Set the torque cassette with the cassette controller assembly attached, then, in SP recording mode (playback mode if a signal has already been recorded in SP mode on the tape), confirm that the torque on the winding side is within the standard.

<Winding torque standard in record (playback) mode>

(If there is torque ripple, read the center value.)

$0.70 \pm 0.4/-0.3 \text{ mN}\cdot\text{m}$, ripple $0.4 \text{ mN}\cdot\text{m}$ or less

6-2. Checking the rewinding playback (VS-REW) winding torque

AC adapter used, without cassette controller assembly (Independent Mechanism)

- (1) Remove the cassette controller assembly, press the DOWN switch, using the adhesive tape and referring to 8-3, operate in the TEST mode (T01) to rewind, and set the rewinding playback (VS-REW) mode.
 (2) Set the torque gauge on the S reel base, press the front end of tension post with your finger in the arrow A direction so as to ascertain that the winding torque is as specified. (Check without rotating the torque gauge.)

<Rewinding playback (VS-REW) winding torque standard>

(If torque ripple exists, read its center value.)

$1.6 \pm 0.6 \text{ mN}\cdot\text{m}$, ripple $0.5 \text{ mN}\cdot\text{m}$ or less

- (3) After checking the winding torque remove the torque gauge, and remove the adhesive tape used in item (1) above (refer to 8-3). The STANDBY mode is set automatically.

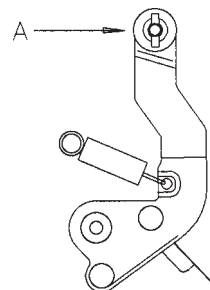


Fig. 1. Removal of tension band when measuring the rewinding playback (VS-REW) winding torque

6-3. Checking of reel base height DC3V, without cassette controller assembly (Independent Mechanism)

- (1) Remove the cassette controller assembly (refer to 8-2).
 (2) Referring to 8-1, apply DC3V to the loading motor and put the system into playback mode.
 (3) Taking adequate care so that the master plane does not contact drum, running parts (guide roller, etc.), or the MIC contacts. Fit the master plane holes to the 2 guides (A and B) in Fig. 2.
 (4) Confirm that the heights of the S reel base reel receiving surface and the Tu reel base reel receiving surface below the master plane top surface are within the set values, using, for example, a slide calliper (Fig. 3).
 When checking the S reel base height, press the front end of tension post in the arrow A direction with your finger to release the tension band, and then check the height in this state (Fig. 1).
 (5) If the height is not within set values, replace the washer under the reel base, and adjust as specified.

Note: After the adjustment, make sure that the reel bases rotate smoothly.

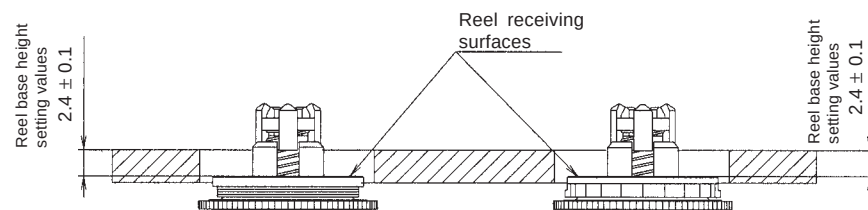


Fig. 3

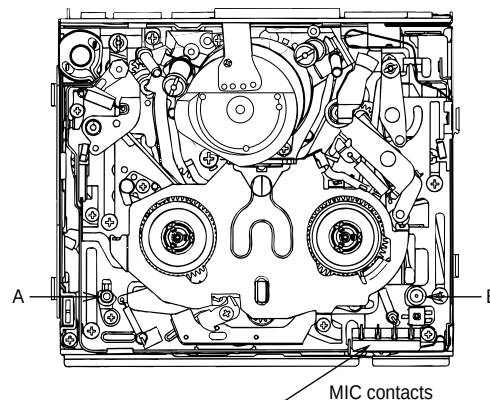


Fig. 2

6-4. Back tension torque check and adjustment in record (playback) mode

AC adapter used, with cassette controller assembly

(1) Checking

Set the torque cassette (SD-1015), and make sure in the SP record mode that the supply side torque is within the standard shown below (or in the playback mode for the tape on which the signal has been SP-recorded).

<Standard>

(If torque ripple exists, read its center value.)

$0.7 \pm 0.1 \text{ mN}\cdot\text{m}$

(2) Adjustment (Fig. 4)

If the value is out of standard range, adjust, using the screw 1 shown in Fig. 4.

1. Loosen the screw 2 slightly.

2. Adjust to turning the screw 1. When back tension is too high, turn the screw 1 counterclockwise (CCW).

When back tension is too low, turn the screw 1 clockwise (CW).

3. After adjustment fix the angle with the screw 2. (At this time take care so as to prevent excessive tightening.) Apply Screw Lock to the screw 1.

<Caution>

Screw tightening torque: $0.04 \text{ N}\cdot\text{m}$

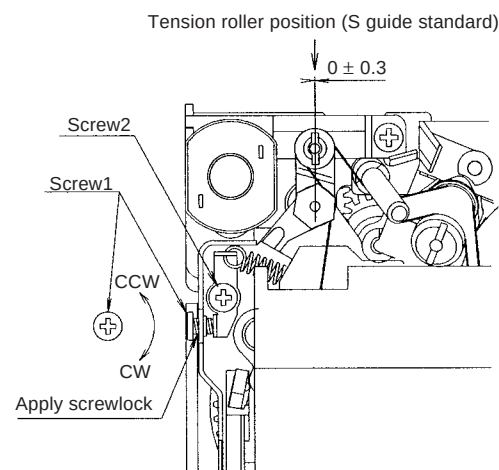


Fig. 4. Check (tape exists)

6-5. Checking and adjustment of tension roller position in record (playback) mode

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Checking

Before winding the 60-min tape make sure that the tension roller is in the same position as S guide as shown in Fig. 4.

If not, take out the tape and adjust in the following procedure.

(2) Adjustment (Fig. 5)

1. Set the playback mode without loading the tape.

2. Loosen the screw 3 slightly (to such an extent that the tension band holder 4 can be moved).

3. If the tension roller is inside from the specified position, shift the tension band holder 4 in the arrow (A) direction. If the tension roller is outside, shift the tension band holder in the arrow (B) direction, and fix with the screw 3. (Proper shift must be 0.2 to 0.6mm outside from the specified position.)

4. Check the position by the procedure described in item (1) Checking above.

5. If the position is not specified position, adjust again.

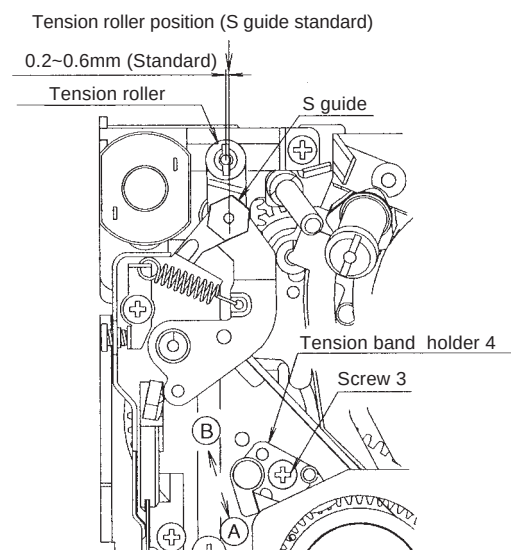


Fig. 5. Position adjustment (tape does not exist)

6-6. Checking of supply S reel base no-load torque

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into L. start mode (refer to 8-1).

(2) Move the swing arm toward the Tu reel base side.

Be careful not to cause damage to the gears and other parts in the process. (Fig. 6)

(3) Set a back tension measurement reel hub on the S reel base.

(4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

<FF back tension standard>

(If the tension fluctuates, read its center value.)

30mN or less

6-7. Checking of loading back tension

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into L. start mode. (refer to 8-1)

(2) Move the swing arm toward the S reel base side. Be careful not to cause damage to the gears and other parts in the process. (Fig. 7)

(3) Set a back tension measurement reel hub on the Tu reel base.

(4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

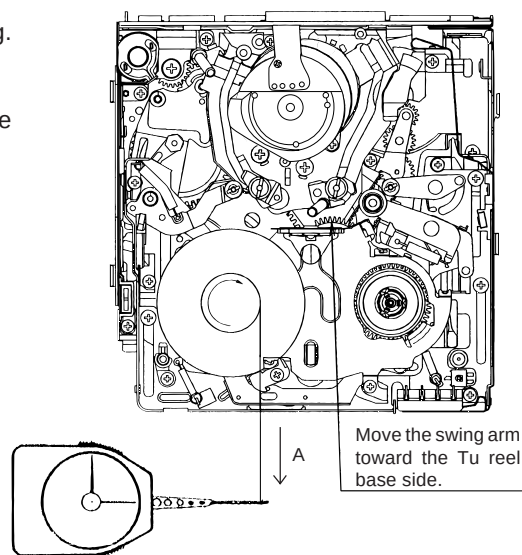


Fig. 6. S reel base no-load torque measurement method

<REW back tension standard>

(If the tension fluctuates, read its center value.)

 $15 \pm 12\text{mN}$ **6-8. Checking of winding Tu reel base ratchet torque**

DC3V, without cassette controller assembly (Independent Mechanism)

- (1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into standby mode. (refer to 8-1)
- (2) Move the swing arm toward the S reel base side.
Be careful not to cause damage to the gears and other parts in the process. (Fig. 8)
- (3) Set a back tension measurement reel hub on the Tu reel base.
- (4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

<Winding Tu reel base ratchet torque standard >

(If the tension fluctuates, read its center value.)

100mN or less

6-9. Checking of rewinding playback (VS-REW) back tension

DC3V, without cassette controller assembly (Independent Mechanism)

- (1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into rewinding playback (VS-REW) mode. (refer to 8-1)
- (2) Move the swing arm toward the S reel base side.
Be careful not to cause damage to the gears and other parts in the process.
- (3) Set a torque gauge on the Tu reel base.
- (4) Turning the torque gauge to counterclockwise (1 turn for 3 seconds), then confirm that the torque is within the standard.

<Rewinding playback (VS-REW) back tension standard value>

(If the tension fluctuates, read its center value.)

 $0.70 +0.6/-0.3\text{mN}\cdot\text{m}$ **6-10. Checking of pinch pressing force**

DC3V, without cassette controller assembly (Independent Mechanism)

- (1) Set the pinch roller pressing force measuring thread on the pinch lever (position A, Fig. 9).
- (2) Set the mechanism to the playback mode, press the pinch roller against the capstan axis.
- (3) Fit the tension gauge to the pinch roller pressing force measuring thread, pull in the arrow B direction shown in Fig. 11 to separate a little the pinch roller from the capstan axis.
- (4) Gradually return the pinch roller, and when the pinch roller contacts parallel the capstan axis, read the value (see Fig. 10) to make sure that the value conforms to the standard shown below.

<Standard> $1.8 +0.3/-0.5\text{N}$ **<Caution>**

After making this measurement, quickly release the system from playback mode and remove the pinch roller from the capstan shaft. (If the pinch roller is left fitted onto the capstan shaft for a long time, the pinch roller will be deformed.)

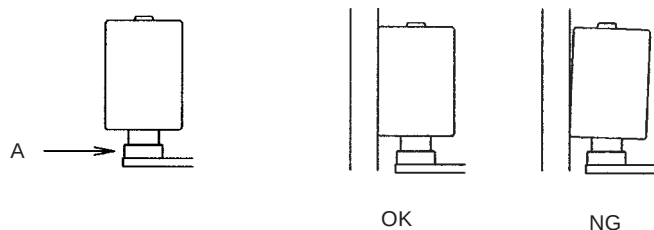


Fig. 9

Fig. 10

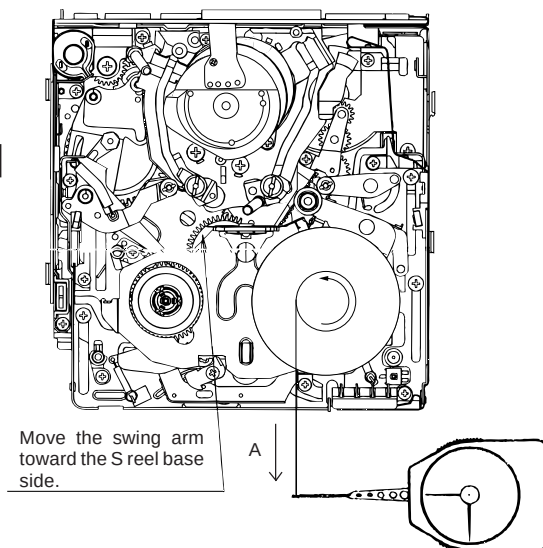


Fig. 7. Loading back tension measurement method

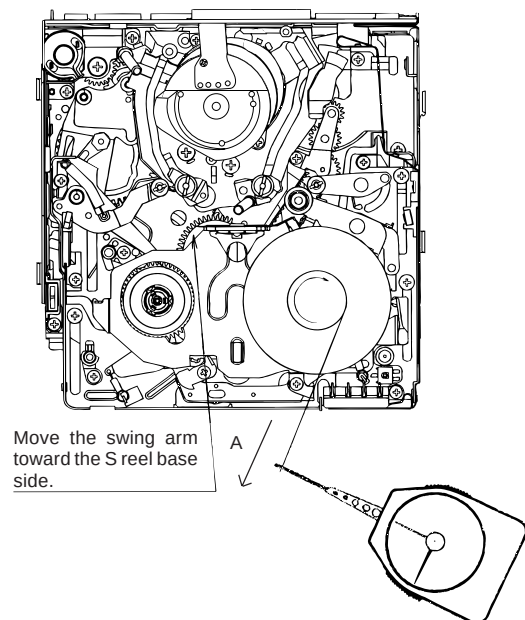


Fig. 8. Winding Tu reel base ratchet torque measurement method

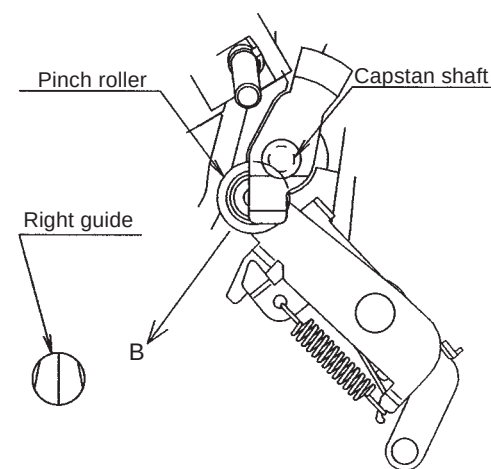
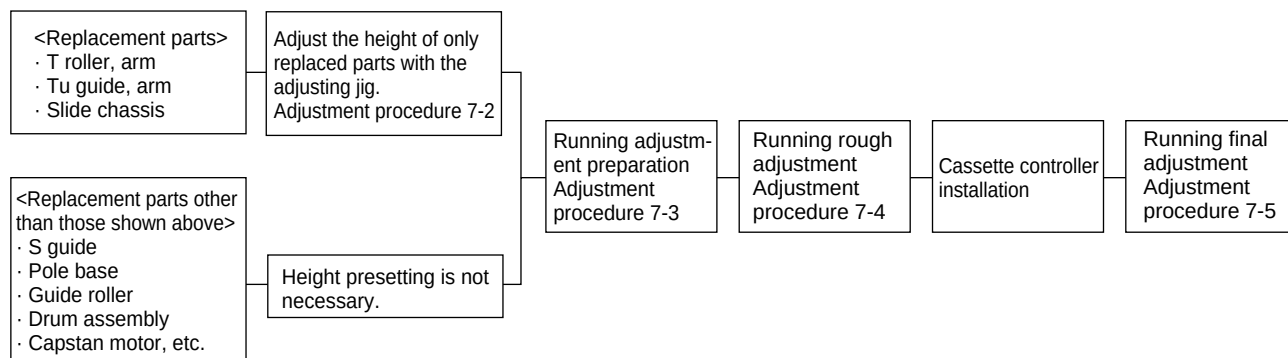


Fig. 11

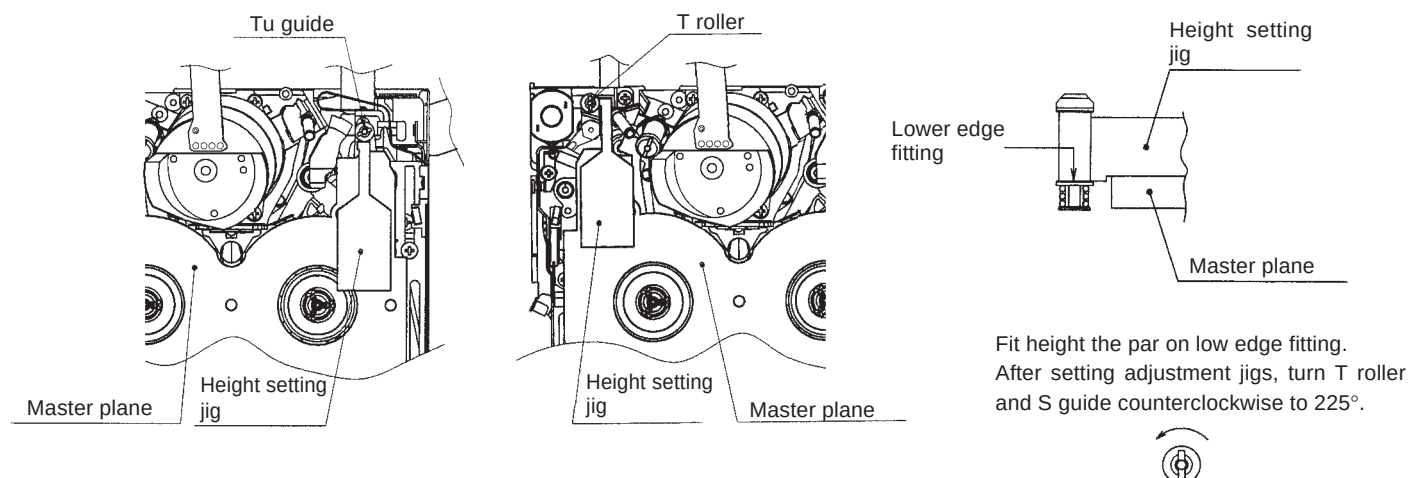
7. TAPE RUNNING ADJUSTMENT

7-1. Adjustment locations



7-2. Running height adjustment

- After replacement of T roller or Tu guide adjust the height . (Adjust only the replaced parts.)
- After height adjustment do not turn the T roller. If crease is found on the tape of Tu guide, remove the crease by rotating. (As for details refer to the “running rough adjustment”.)
- After height adjustment of T roller or Tu guide, apply Screw lock to an end of shaft. (After replacement of S guide apply Screw lock to same point, too.)

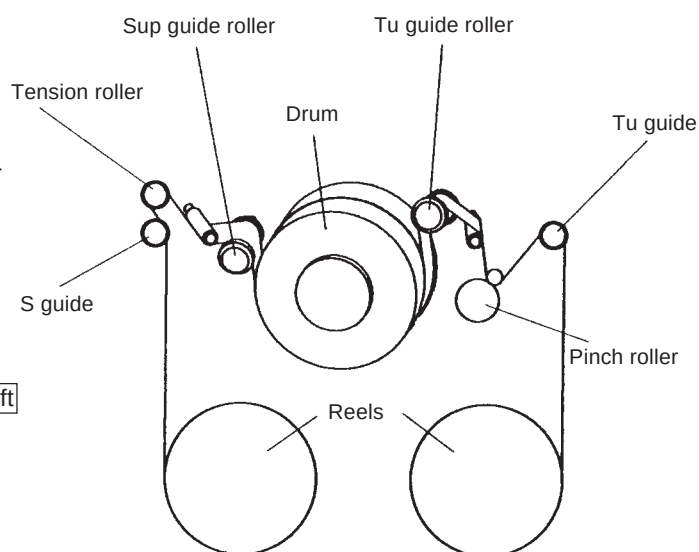


7-3. Preparation for tape running adjustment

Meters, jig... Oscilloscope, Adjustment remote control, Height adjustment screw driver, Alignment tape (for tape running adjustment, for switch point adjustment), Master plane, Height adjustment jig.

<Method and description>

- (1) Remove the cassette controller assembly.
- (2) Clean the tape running surface (especially, adequately clean the drum surface and the lower drum helicam surface).
- (3) Connect an oscilloscope to each TP on the relay circuit board.
- (4) Turn the AC adapter power ON.
- (5) Using the adjustment remote control unit, put the system TEST mode T-05.
- (6) Replay the alignment tape for running adjustment, and make sure that the tape is running in the SP mode.
- (7) Check the oscilloscope playback envelope, then, at +1/4 shift and -1/4 shift, check whether all of it is flat. If it is not, perform the following adjustment so that it becomes flat. (Each time you push the PLAY key, the shift will change; +1/4 shift → Normal → -1/4 shift → Normal, in order.)



7-4. Running rough adjustment

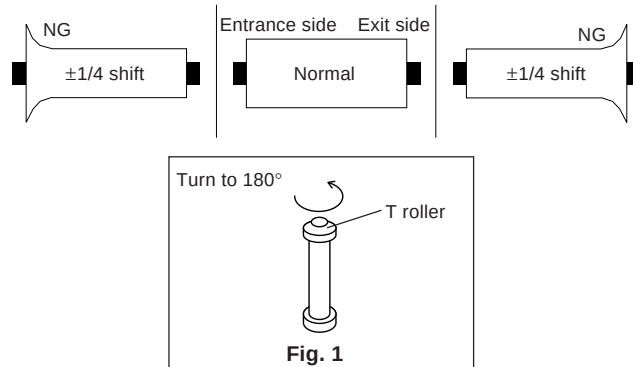
(Since this adjustment is performed without cassette controller, put a proper weight so that the cassette does not rise, and make an adjustment.)

1) Su, Tu guide roller height adjustment

<Method and description>

- (1) Loosen the guide roller lock screw, then tighten loosely so that the roller turns easily.
- (2) Replay an alignment tape, and adjust the Sup, Tu guide roller so that the envelope sides of entrance and exit are flat.
- (3) Perform $\pm 1/4$ shift, then, as in the above case, adjust until the envelope becomes flat.

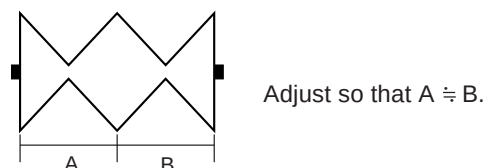
* If running is difficult for the entrance changed, turn the T roller to counter clockwise 180° . (refer to Fig. 1)



2) Check of V/SR envelope wave form

<Method and description>

- (1) Confirm that the envelope waveform peaks in V/SR mode are uniform.
- (2) If they are not uniform, fine-adjust the guide roller and the Tu guide.



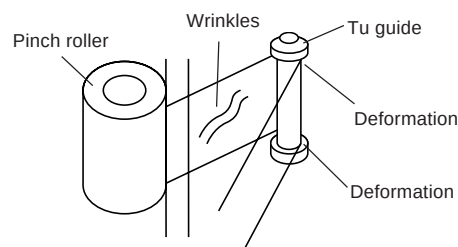
3) Check of tape wrinkles

<Method and description>

- (1) Check that the tape is not distorted between the Tu guide and pinch in the PB mode and the V/SR mode.

⇒ If crease is found, make an adjustment in the range of $\pm 180^\circ$.

⇒ After adjustment apply Screw Lock.



4) Check the rising time of the envelope wave form

<Method and description>

- (1) Check the rising time of the envelope when switching from V/SR mode to PB mode. (Within 5 sec)
- (2) Check the rising time of the envelope when switching from STOP mode to PB mode. (Within 5 sec)

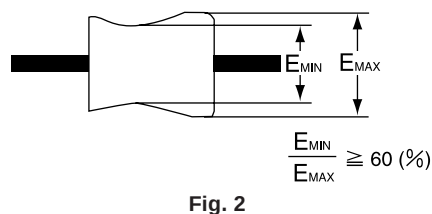
7-5. Final running adjustment

(Perform adjustment without removing the cassette controller.)

1) Adjustment of Sup and Tu guide roller height

<Method and description>

- (1) Perform $\pm 1/4$ shift, then if the envelope wave's ratio of MAX. to MIN. are 60% or less, adjust again the height of guide roller. (Refer to Fig. 2)
- (2) Finally adjust the lock screw of Sup and Tu guide roller.
- (3) Once perform unloading and then loading to set the PB mode, and make sure that the envelope waveform does not change.



2) Adjustment of playback SWP

<Method and description>

- (1) Playback the alignment tape for switch point adjustment.
- (2) Perform SWP automatic adjustment with adjustment remote control.

* When replacing the mechanism and drum, adjust the phase and equalizer using the adjustment remote control. (Refer to "9. ADJUSTMENT THE ELECTRICAL CIRCUIT".)

8. MECHANICAL SECTION ASSEMBLY AND PARTS REPLACEMENT (DISASSEMBLY AND REASSEMBLY)

Mechanical section disassembly and reassembly are explained in this section.
For removal of the cabinet, etc., refer to **3. DISASSEMBLY OF THE SET**.

<Precautions>

1. Always replace cut washers that have been removed, for example in parts replacement, with new ones.
2. When reassembling, be careful not to allow screws, washers or foreign matter to enter. They can cause mechanical misoperation.
3. Use the cleaning liquid, oil, grease and screw lock that are specified below. Use of any other kind can cause mechanical misoperation.

Oil: Cosmo Petroleum : Cosmo Hydro HV22

Screw lock: Three Bond :1401B

Grease: Dow Corning : Moly Coat YM-103

Cleaning liquid: Industrial-use ethyl alcohol

4. Turn the mechanical section over, do not place it on, for example, a desk. Deformation and scratching of mechanical parts can cause trouble.

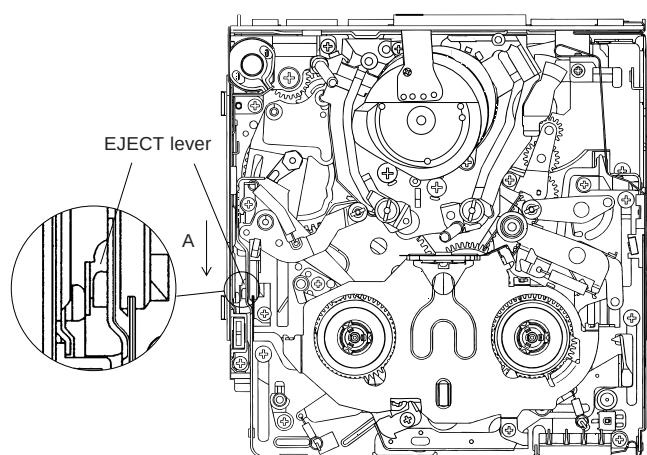
8-1. On the mechanical modes

When operating the mechanism separately, apply DC3~4V to the loading motor.

(When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause operational problems.)

(1) EJECT mode

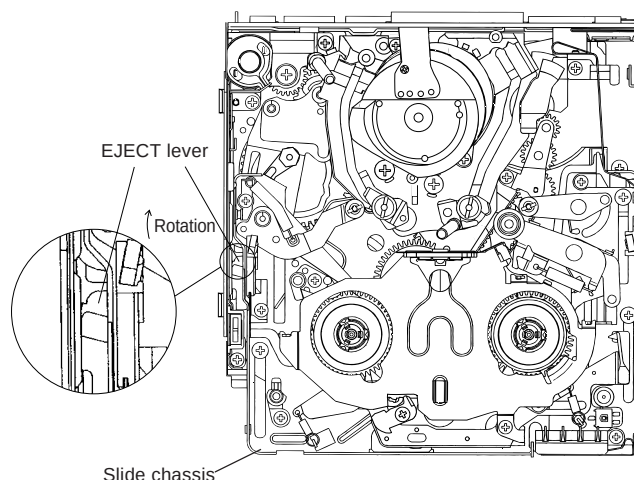
The mechanism position to take out the cassette where the EJECT lever is extremely shifted in the A direction. (It is impossible to lock the cassette controller assembly in this mode.)



EJECT mode diagram

(2) STANDBY mode

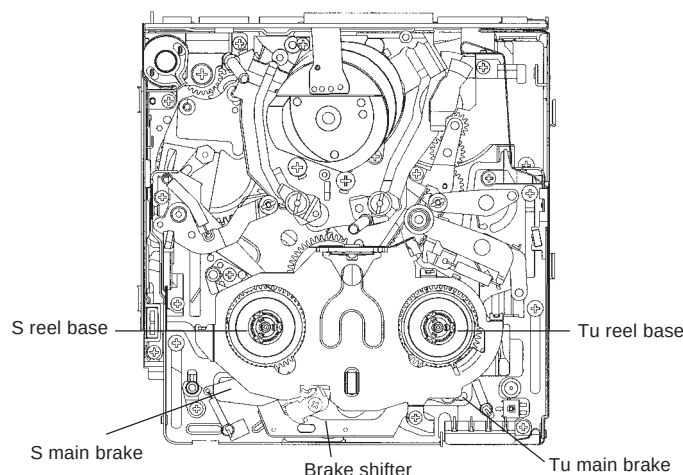
The mechanism position to set the cassette where the slide chassis is at the farthest position from the drum and the EJECT lever is in clockwise rotated position (position where the cassette controller assembly can be locked).



STANDBY mode diagram

(3) LOADING START mode

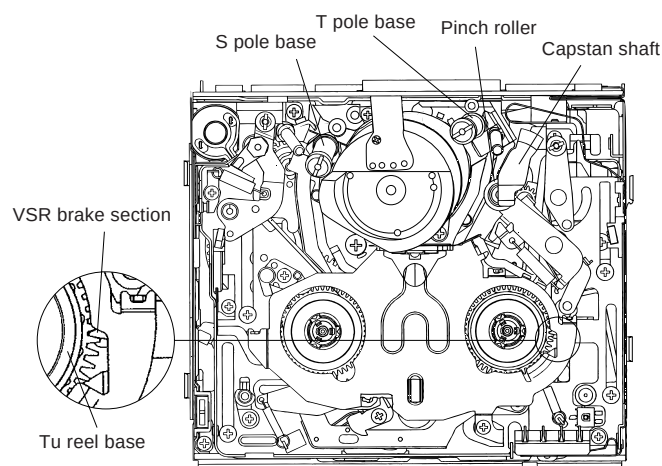
This is the mode where the tape is wound around the winding reel when a cassette with visible wind start leader tape is loaded. (The brake shifter moves to the left, the S main brake is separated from the S reel base and the Tu main brake is separated from the Tu reel base.)



LOADING START mode diagram

(4) REWINDING (VSR) mode

The mechanism position to rewind the tape (fast rewinding playback). The S and T pole base is pressed, the pinch roller is pressed to the capstan axis, the brake shifter VSR brake section engages with the Tu reel base gear.

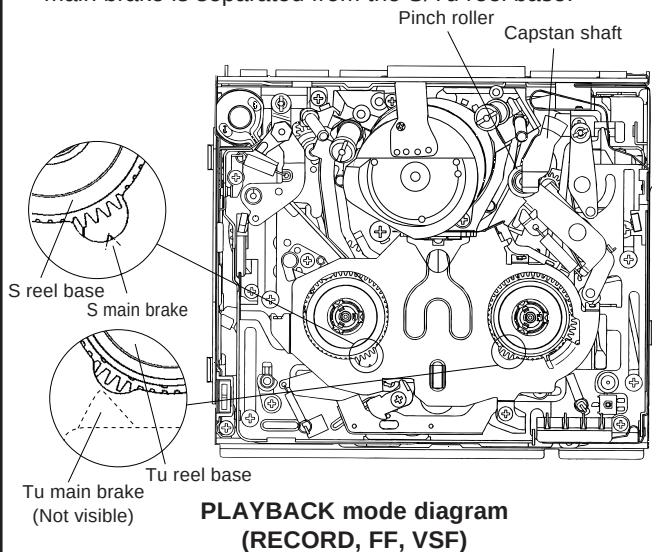


REWINDING (VSR) mode diagram

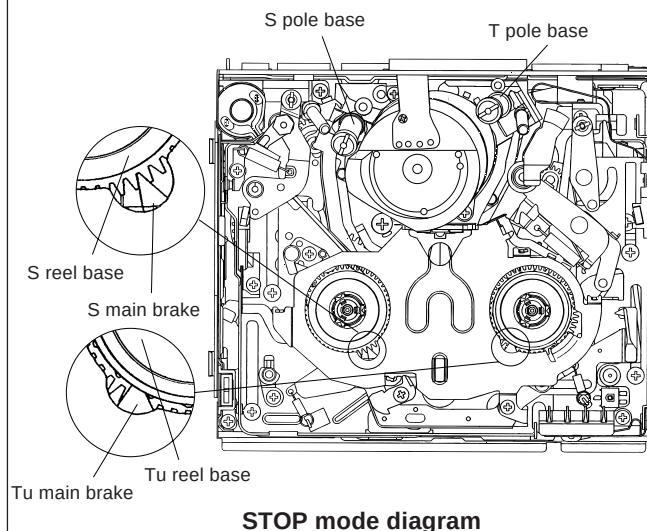
(5) PLAYBACK (RECORD, FF, VSF) mode

The mechanism position for playback, record, FF and fast feed playback.

The pinch roller is pressed to the capstan axis, and the S/Tu main brake is separated from the S/Tu reel base.

**(6) STOP mode**

The system is in the STOP (Rec Lock in CAMERA mode) position; the S and the T pole bases are snap-fitted to the drum base, the S brake is in contact with the S reel base, and the Tu brake is in contact with the Tu reel base.

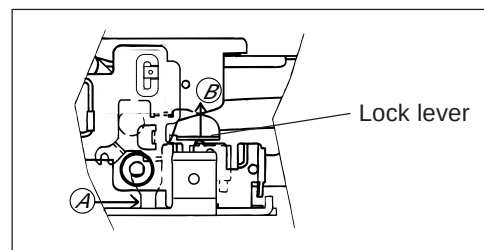
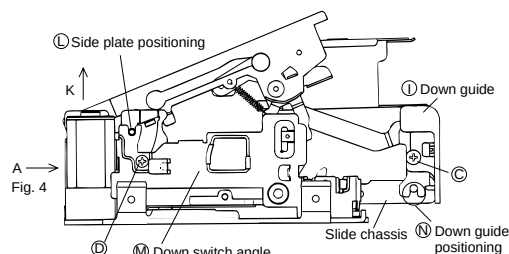
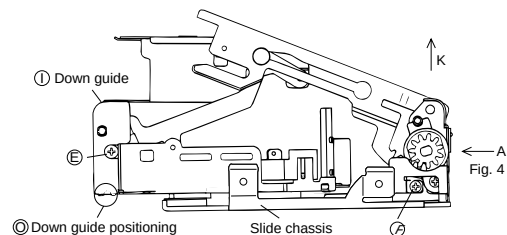
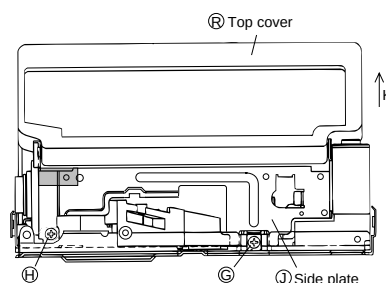
**8-2. Cassette controller assembly****<Removing>**

- (1) Remove the CAP FPC cover. (Remove the Head amplifier PWB unit and tighten screw together.)
- (2) Apply DC3V to the loading motor to set the standby mode. Press the lock lever in the arrow direction to move up the cassette controller. (See Fig. 1, direction A or B)
- (When the lever is pressed in the direction A, gently raise the cassette controller to release.)
- (3) Remove the screws C and E shown in Fig. 2 and Fig. 3, and remove the Down guide I.
- (4) Remove the screws D, F, G, and H shown in Fig. 2, 3 and 4, raise the side plate J in the direction K to remove it.

Note) When removing the cassette controller, take care so that the drum motor FPC provided between the side plate J and the top cover R is not damaged and so that the drum is not damaged.

<Installing>

- (1) Apply DC3V to the loading motor to set the standby mode.
- (2) Install the side plate J.
 - 1) Lower the cassette controller assembly in the direction contrary to K in Fig. 4, and fit the screws G and H as shown in Fig. 4.
Tightening torque $40 \pm 4\text{mN}\cdot\text{m}$
Before fitting the screws G and H make sure that the side plate positioning section L engages with the down switch angle in Fig. 2.
- Note) When lowering the cassette controller assembly in the direction contrary to K, place the drum motor FPC between the side plate J and the top cover R. At this time be careful so that FPC is not damaged. Take care so that the drum is not damaged.
- (2) In Fig. 2 fit the screws D.
- (3) In Fig. 3 fit the screw F.
- (3) Install the down guide I.
 - 1) In Fig. 2 and Fig. 3 engage the slide chassis down guide positioning sections N and O with the down guide, install with the screws C and E.
Tightening torque $40 \pm 4\text{mN}\cdot\text{m}$
- (4) Attach the CAP FPC cover.
 - 1) Attach the Head amplifier PWB unit and tighten screw together.
Tightening torque $40 \pm 4\text{mN}\cdot\text{m}$

**Fig. 1. Lock lever****Fig. 2****Fig. 3****Fig. 4. (Fig. from direction A)**

8-3. How to operate with the circuit board without the cassette controller assembly.

In this method, if the procedure is followed incorrectly there is danger of damaging the mechanism and the tape, so except in special cases, such as when measuring the VSR torque, do not perform this procedure. Normally operate this unit with the cassette controller assembly attached.

Be sure to follow each caution mentioned.

- (1) Apply DC3V to the loading motor to set the EJECT mode.
- (2) Remove the down switch angle.
 - 1) In Fig. 5 remove the screws (P) and (Q).
- Note) The loading motor solder joint (part T, Fig. 5) of DEW sensor FPC applied to the down switch angle is not removed. After the down switch angle is removed, take care so that the DEW sensor FPC is not broken.
- (3) Surely secure the moving piece (R) of down switch as shown in Fig. 6 with the aid of adhesive tape so that the switch is turned on.
- (4) Install the down switch angle.
- Note) To set the REC mode, press the pin of recognition switch (S) (not required in other modes).
- (5) Set the test mode (T-01) with the adjustment remote controller without loading the tape. Thereby the mechanism operation is enabled with the mode key.
- (6) To eject, remove the tape (3).

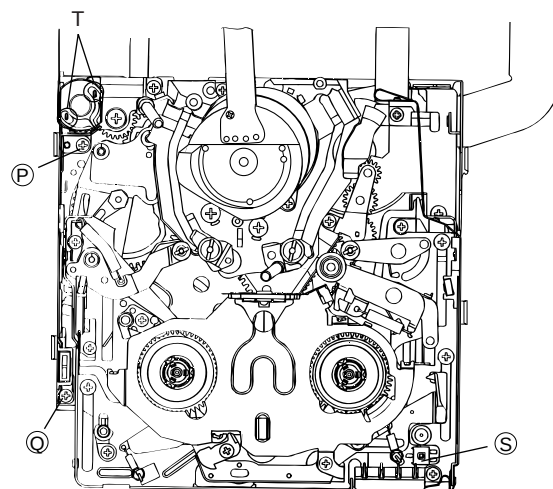


Fig. 5. STANDBY mode

8-4. Phase matching

For the parts listed below, match the phases as shown in Fig. 7.

- (1) AHC cam (2) MODE switch (3) Main cam (4) Sub cam

Note) Before disassembling, check the marker positions carefully.

Note) When installing the engagement gear, make sure that the main cam and sub cam phase matching hole aligns with the chassis hole.

Note) After phase matching, turn the MODE switch by hand and confirm that it turns almost one complete turn. (After checking, return it to its original position.)

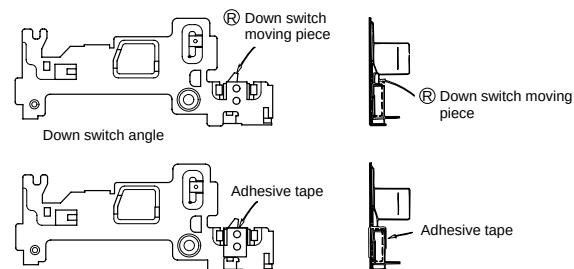


Fig. 6

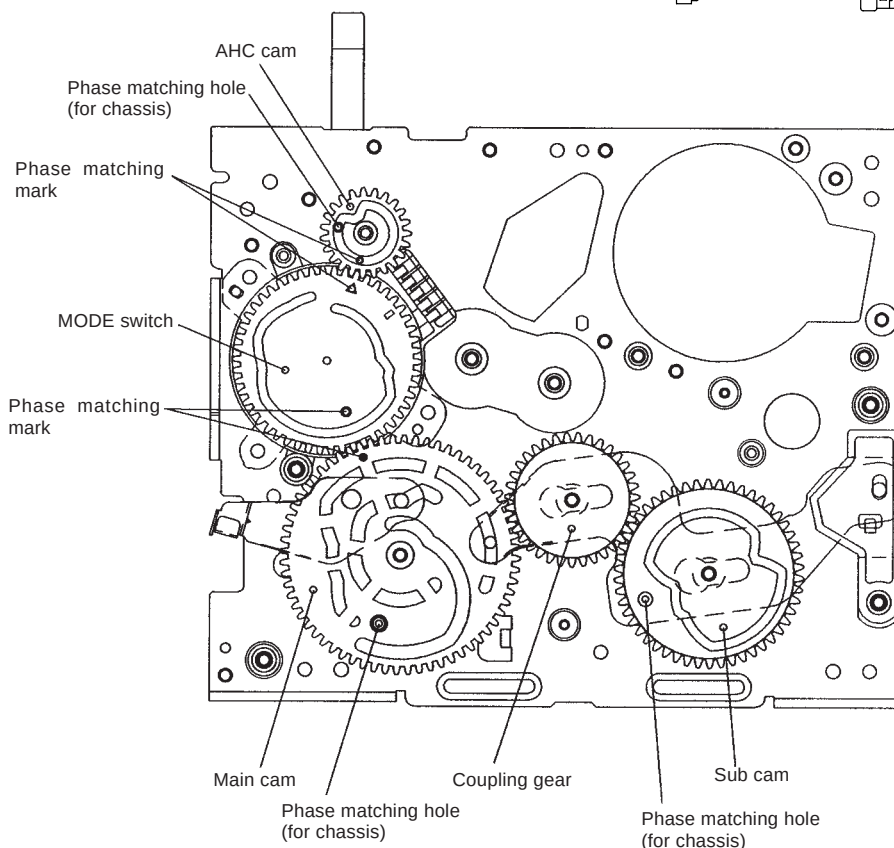


Fig. 7

8-5. Reassembly

8-5-1. Reassembly in side of the main chassis.

Note) Numbers before part names are given as a guide to the order of assembly.

As for greasing/oiling/cleaning places refer to the attached drawings (Grease/Oil application Fig. 1, 2).

1.

(1) Pinch control lever
(2) Pinch drive lever
Main chassis assembly (Front surface)

2.

(2) Mechanism fixing angle assembly (Rear surface)

B-2, B-5, B-3, B-4, B-6, B-1, A-2, A-1, A-3, (1) Mode switch, Mode FPC, (441), (301) Main chassis assembly (Rear surface)

Note) The numbers following A and B indicate the screw tightening order.

	Item	Tightening torque	Quantity
A	S Tight · M1.4 x L3	70mN·m	3
B	S Tight · M1.4 x L2	70mN·m	6

3.

Cam groove grease, (7) T arm control lever, (8) AHC control lever, (3) Main cam, (1) EJECT lever, (6) AHC cam, (2) Lock lever guide, (5) Coupling gear, (4) Sub cam, Positioning hole, (304), (309), (310), (302), (379), (370), (371), (314)

	Item	Tightening torque	Quantity
B	S Tight · M1.4 x L2	70mN·m	1
C	CWØ1.2-Ø3.0-t0.25		2

4.

(5) Capstan motor (462), (1) Slide chassis guide, (3) Loading lever, (2) Shifter drive lever assembly, (4) Tu guide cam, Mechanism fixing angle, To cam groove, Drawing part grease, (306), (305), (311), (314)

	Item	Tightening torque	Quantity
B	S Tight · M1.4 x L2	70mN·m	2
C	CWØ1.2-Ø3.0-t0.25		1
D	Special screw · M1.4 x L1.6	40mN·m	4

5.

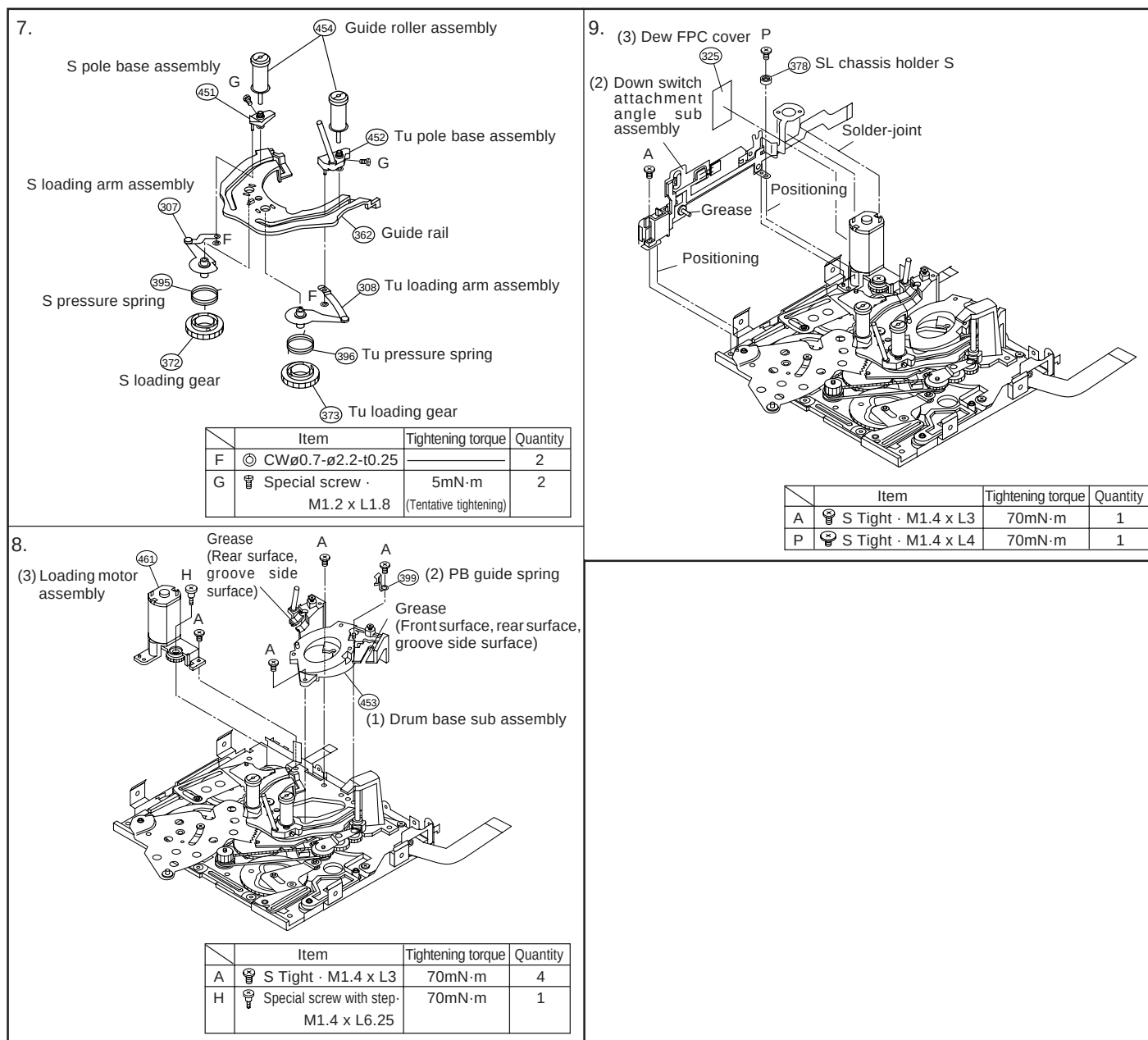
(3) Timing belt, (2) Center pulley assembly, (1) Intermediate pulley assembly, (4) Intermediate gear angle sub assembly, (312), (364), (365), (421), (367), (459), (366)

	Item	Tightening torque	Quantity
B	S Tight · M1.4 x L2	70mN·m	1

6. Phase match check

Phase match check, Enter part of convexity rear surface, (1) Guide rail sub assembly, Guide rail sub assembly (Rear surface), E, E

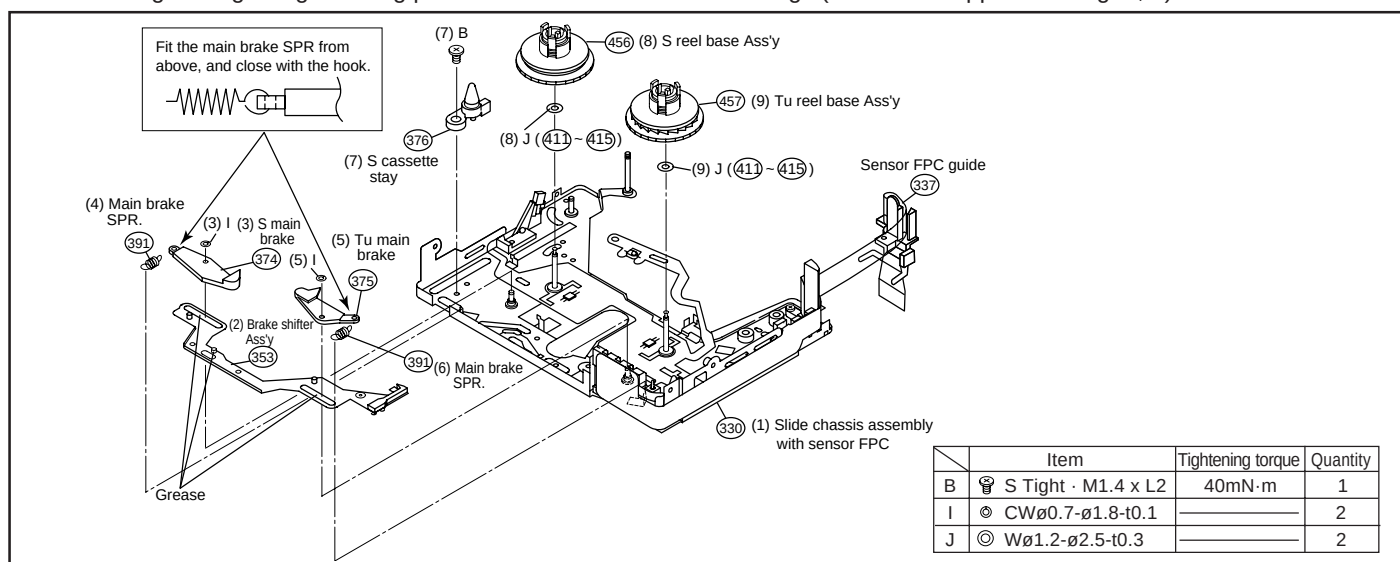
	Item	Tightening torque	Quantity
E	Special screw · M1.4 x L1.5	40mN·m	2

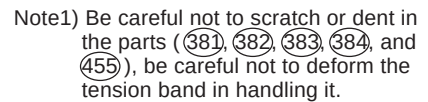


8-5-2. Reassembly in side of the Slide chassis.

Note) Numbers before part names are given as a guide to the order of assembly.

As for greasing/oiling/cleaning places refer to the attached drawings (Grease/Oil application Fig. 3, 4).



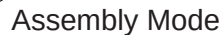


Note2) Be careful not to deform to tightening the (428) coat the Screw lock to the point of shaft.

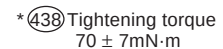
	Item	Tightening torque	Quantity
B	🔩 S Tight · M1.4 x L2	_____	1
C	🌀 CWø1.2-ø3-t0.25	_____	1
F	🌀 CWø0.7-ø2.2-t0.25	_____	3
L	🔩 Type 2 minuteness · M1.4 x L1	40mN·m	1
K	🔩 Special head screw · M1.4 x L2	40mN·m	2
M	🔩 Special screw with step· M1.4 x L1	40mN·m	1

(1) Set the L/S mode (see the figure below).

D	C	B	A
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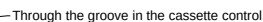


	Item	Tightening torque	Quantity
B	 S Tight · M1.4 x L2	40mN·m	1
D	 Special screw · M1.4 x L1.6	40mN·m	4



- Numbers before part names are given as a guide to the order of assembly.
- When treating the sensor FPC wire, pay attention to the part A shown in Fig. 6.
- Oil application place is shown in Fig. 5.

	Item	Tightening torque	Quantity
I	⊗ CWØ0.7-Ø1.8-t0.1	—	1
N	⚙ Type 1 minuteness M1.4 x L1	40mN·m	1



	Item	Tightening torque	Quantity
D	 Special screw · M1.4 x L1.6	40mN·m	2
O	 Special screw · M1.4 x L2	40mN·m	1

GREASE/OIL APPLICATION

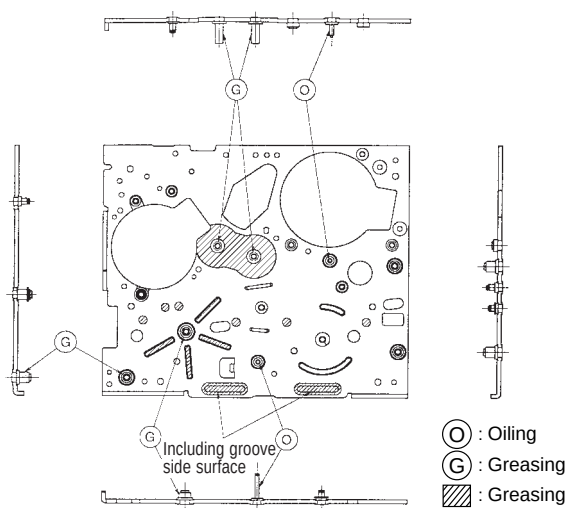


Fig. 1. Side of the main chassis

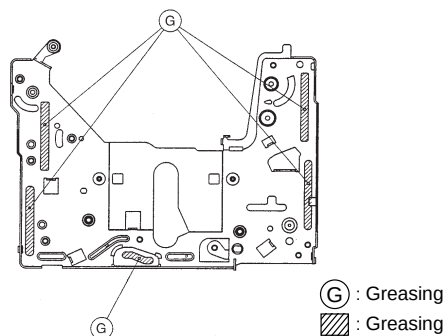


Fig. 3. Side of the slide chassis

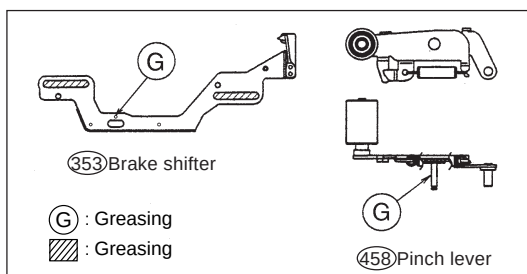


Fig. 4. Side of the slide chassis

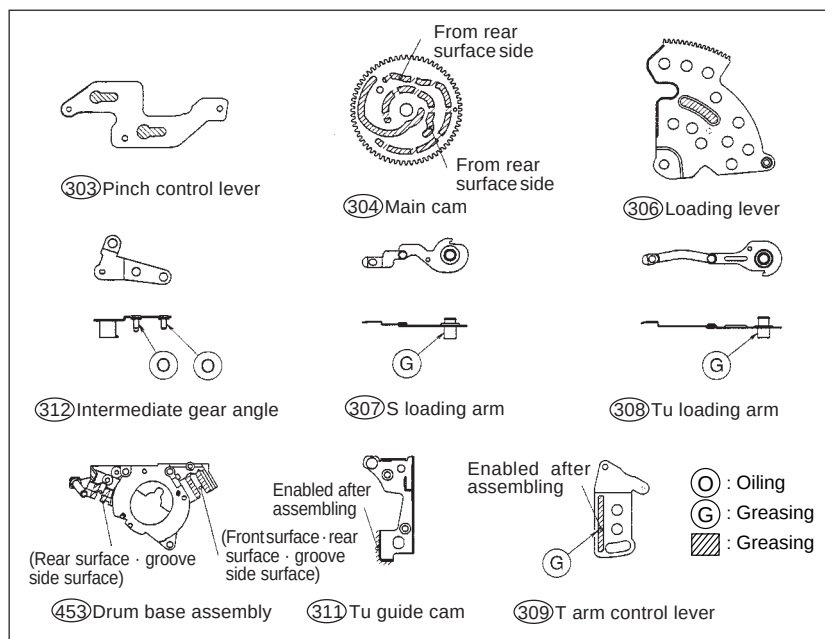


Fig. 2. Side of the main chassis

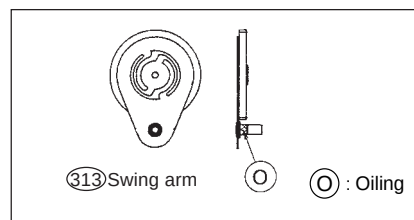


Fig. 5. After joining the main chassis and slide chassis

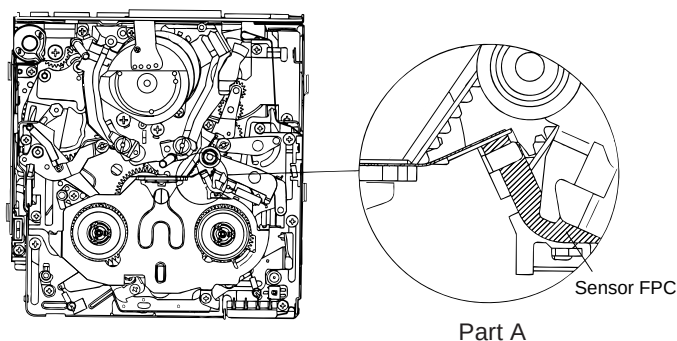


Fig. 6. Sensor FPC wiring

8-6. Removing the cassette

- (1) Apply DC3V to the loading motor unload slightly.
- (2) After the tape is slackened, turn the rotor (lower side of mechanism) of capstan motor to tighten the tape. (Arrow direction, Fig. 1)
- (3) Repeat the operations (1) and (2). After the pole base has been completely unloaded, ascertain that the tape is not loose.
- (4) Finally apply again DC3V to the loading motor, so that the cassette controller ejects.
- (5) Take out the cassette.

Note) DC3V is applied to the loading motor as shown Fig 1. Then, the mechanism moves in the unloading direction.

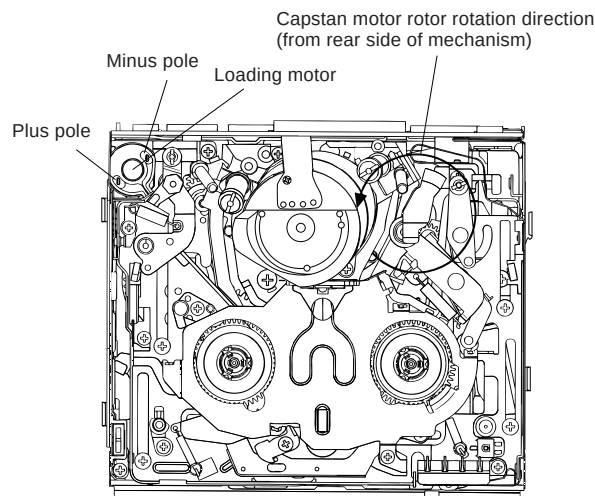


Fig. 1

9. ADJUSTING THE ELECTRICAL CIRCUITS

Before starting the electric circuit adjustment

- The adjustment methods described herein are used, in most cases, when the expendable mechanical parts, including the video head, have been replaced, at which time the electrical circuits need to be readjusted. Before adjusting the electrical circuits, make sure that the mechanism works properly (i.e., the mechanism is properly adjusted). In case of the occurrence of any problem to the electrical circuits, be sure to use the specified measuring instruments to locate the area to which the problem is occurring, and then take the necessary action, including repair, replacement or adjustment, exactly as instructed in the electrical adjustment methods that will follow.

Do not attempt to make adjustments without using the proper measuring instruments.

- This machine is configured so that the electrical circuits inside its PWB unit are composed, for the most part, of high-density, small surface-mounted component parts for downsized machine body.

To perform repair service or parts replacement, do so using a soldering iron, but in as short a time as possible; this is because surface-mounted component parts are generally so small in size and susceptible to heat, as compared with the large discrete parts used in TV sets, desk-top video decks, etc., that attempting to heat their electrodes for a longer time than is necessary with a soldering iron may result in their becoming defective.

This applies particularly when replacing the laminated chip capacitors.

For this purpose, ceramic soldering irons with a temperature regulator are recommended (iron tip temperature 250°C and soldering time 5 seconds or shorter).

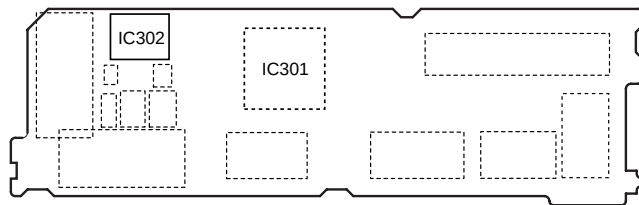
Chip ID as per Digital Interface IEEE1394 Standard

The VL-PD3AS/AH/AE and other models that follow are newly equipped with the digital interface function. The Digital Interface IEEE1394 Standard stipulates that each set with the digital interface function be given its specific ID number. The ID number is written on the E²PROM of the set while it is manufactured. If the E²PROM alone or the PWB having this E²PROM on it has been replaced for repair purpose, it is necessary to write a new ID number again. (Note that any replacement part does not have an ID number yet.)

Accordingly, the repair engineer must obtain the new ID number.

Writing a Chip ID number as per Digital Interface IEEE1394 Standard

Head amplifier PWB



If the IC302 (E²PROM) or the head amplifier PWB has been replaced, it is necessary to write a new ID number. (Note that any replacement part does not have an ID number yet.)

Obtain a new ID number from the service department of sales company. Take the following steps to write the ID number on the E²PROM.

■ Manual for obtaining and handling IEEE1394 ID number

1. Access the intranet URL for the number below.
URL: http://www.rog.kami.sharp.co.jp/quics/e_index.html
2. Now enter User ID and Password, then click .

*ID and Password should be same as for "PARTS PRICE LIST".

■ ID code is acquired

1. Connect with the EUI48/64 ID code control system.

(1) Start the Internet Explorer or Netscape Navigator.

(2) Access the following address.

(URL: http://www.rcg.kami.sharp.co.jp/quics/e_index.html)

Select the "EUI48/64 ID code control system" from the "Service" item.

Note: If you want to establish a connection by directly inputting the URL, please input the following.

URL: http://www1.rcg.kami.sharp.co.jp:7000/adrs_agt/adrs_dba/ide00010.main

The login screen will appear.

(3) For the [User ID], input the [Password].
Click on [Login].

(4) Click on [EUI 64 (IEEE 1394)] from the [1. Application for acquisition of ID].

(5) Click on [Repair use].

(6) Input the necessary information for the application.

For the indispensable input items, be sure to input them.

Select the [Group/company] and [Kind name] from the list.

Input the [Model name].

Input the [Serial number].

Input the [Site/department of repair].

For the input items when making each application, refer to the "Input item list for the ID acquisition application".

EUI 64 (IEEE1394) Application for acquisition of ID / Repair use		
Input the following items.		
Input date	08-MAY-00	
User ID code	I01652	
Name		Input of half-sized characters.
Group/company	Audio-Visual Systems Group ▼	Select from the list.
Kind name	ViewCam with LCD ▼	Select from the list.
Model name		Input of half-sized characters. Compulsory input items. Do not input "-" (hyphen).
Serial number		Input of half-sized characters. Compulsory input items.
site/department of repair		Input of half-sized characters. Compulsory input items.
motion back to select menu Back to menu		

(7) Click on [motion].

The confirmation screen will appear.

EUI 64 (IEEE1394) Application for acquisition of ID / Repair use		
Input the following items.		
Input date	08-MAY-00	
User ID code	I01652	
Name	TaroYamada	Input of half-sized characters.
Group/company	Audio-Visual Systems Group ▼	Select from the list.
Kind name	ViewCam with LCD ▼	Select from the list.
Model name	VL-PD3AS/AH/AE	Input of half-sized characters. Compulsory input items. Do not input "-" (hyphen).
Serial number	1111112	Input of half-sized characters. Compulsory input items.
site/department of repair	SHARP	Input of half-sized characters. Compulsory input items.
motion back to select menu Back to menu		

(8) Click on [Yes].

EUI 64 (IEEE1394) Application for acquisition of ID/Repair use	
Input date	08-MAY-00
User ID code	I01652
Name	TaroYamada
Group/company	Audio-Visual Systems Group
Kind name	ViewCam with LCD
Model name	VL-PD3AS/AH/AE
serial number	1111112
The site/department of repair	SHARP
VL-PD3AS/AH/AE	
EUI 64 (IEEE1394) Application for acquisition of ID/Repair use You will acquire an ID code based on the above information. Are you sure?	
Yes No	

5. Print the application result.

(1) Print out the application result screen.

Control the application result as evidence.

To print it, select "Print (P)" from the "File (F)" in the menu bar or click on the print button in the tool bar.

(2) Click on [Menu] to complete the application.

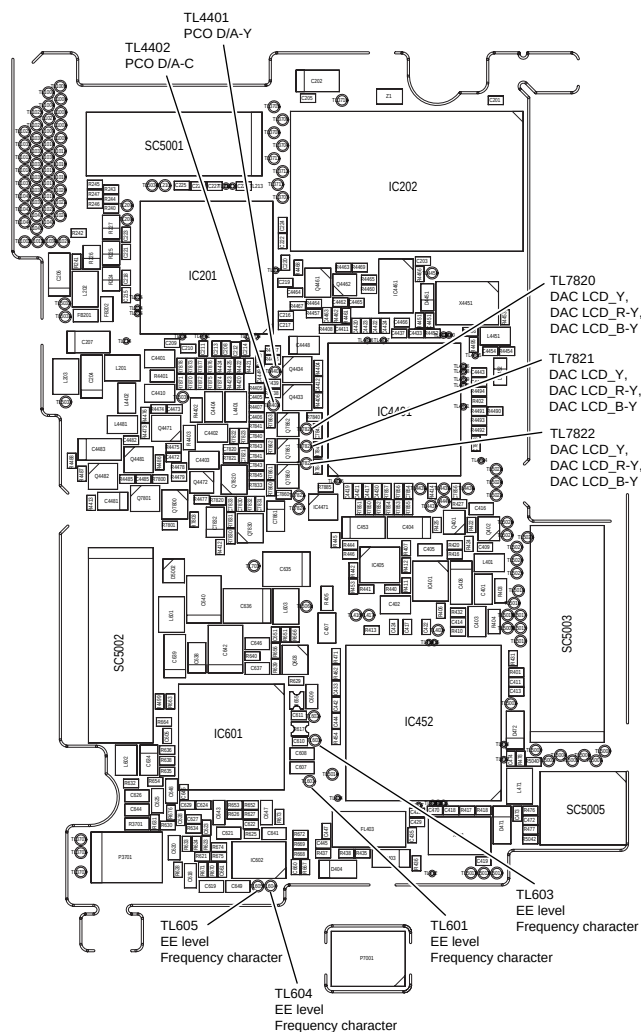
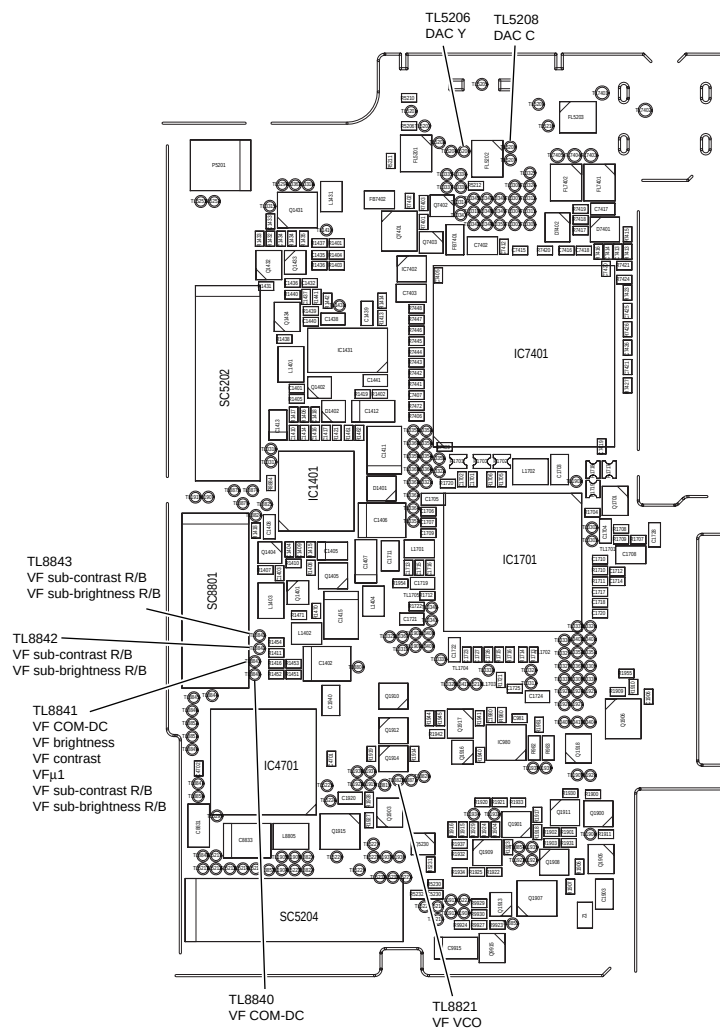
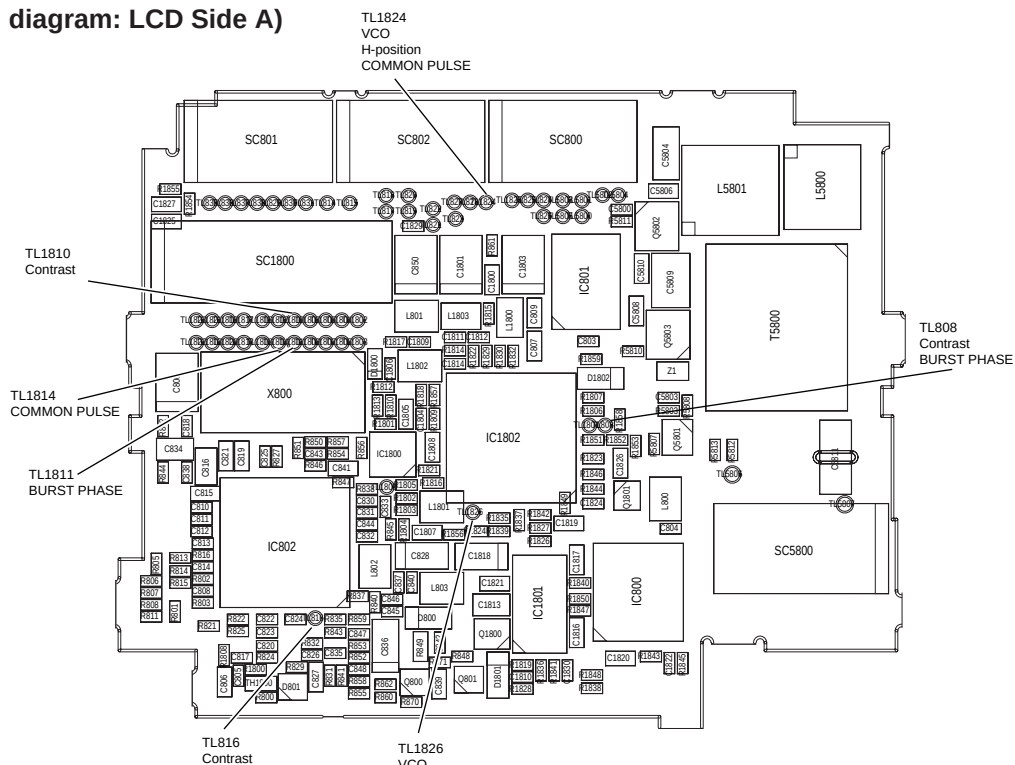
If you create applications in succession, repeat steps (1)~(8).

To complete it, click on [End] in the menu screen.



VL-PD3AS/AH/AE Specifications of service jigs

No.	Connection section	Connector REF. No.	No. of pins	New or Continuation	Part cord	Price code
1	H/A PWB-H/A FPC	P306←	80B-B	C	QCNW-1832TAZZ	BV
2	H/A FPC-MAIN2	→SC3301	80B-B		CPWBH2876TA01 Unit use	AS
3	POW2-MAIN2	SC902-P1900	70B-B		Direct connection	
4	POW2-ZOOM SW	SC901←	10		QSW-Z0310TAZZ Unit use	AT
5	POW2-Battery Terminal	SC900←	20B-B		QTANZ0136TAZZ Unit use	AR
6	MAIN2-VF	SC8801←	20	C	QCNW-1774TAZZ	BH
7	MAIN2-Relay	SC5204-SC2002	28	C	QCNW-1538TAZZ	BC
8	MAIN2-MAIN1	SC5203-P5001	100B-B	C	QCNW-1907TAZZ	BY
9	MAIN2-MAIN1	SC5202-SC5002	51		QPWBH2881TAZZ Unit use	AF
10	MAIN2-EJECT SW Unit	P5201←	2		QSW-Z0309TAZZ Unit use	AG
11	MAIN1-MIC	P601←	3		RMICC0083TAZZ Unit use	AR
12	MAIN1-Remocon Light Reception Unit	P3701←	3		RUNTK0343TAZZ Unit use	AM
13	MAIN1-Relay	SC5003-SC2001	28	C	QCNW-1538TAZZ	BC
14	MAIN1-Power SW	SC3702←	5		QSW-Z0312TAZZ Unit use	AR
15	MAIN1-CAM HEAD	P1001-SC501	50B-B	C	QCNW-1909TAZZ	BT
16	Relay-RS232C Unit	P2010←	4		RUNTK0342TAZZ Unit use	AL
17	Relay-GAMMA/MENU SW	P2008←	3		QSW-Z0321TAZZ Unit use	AK
18	Relay-VCR OPE SW	SC2007←	5		QSW-Z0311TAZZ Unit use	AT
19	Relay-LCD	SC2004-SC801	10	C	QCNW-1769TAZZ	BF
20	Relay-LCD	SC2005-SC802	10	C	QCNW-1769TAZZ	BF
21	Relay-LCD	SC2003-SC800	10	C	QCNW-1769TAZZ	BF
22	Relay-LCD Turn SW	P2006←	2		QSW-Z0308TAZZ Unit use	AG
23	Relay-Speaker	P2009←	2		VSP0020P-A18E Unit use	AL
24	LCD-LCD Panel	SC1800-Panel	24	C	QCNW-1274TAZZ or QCNW-1382TAZZ	AZ BD
25	LCD-LAMP Unit	SC5800←	4		Direct connection : High tension caution	
26	LENS Unit-CAM HEAD	LENS FPC-SC551	24		Direct connection	
27	MAIN2-MAIN1	SC5201-SC5001	20	C	QCNW-1370TAZZ	AR

[TEST POINT]**(Wiring board diagram: Main1 Side A)****(Wiring board diagram: Main2 Side B)****(Wiring board diagram: LCD Side A)**

[Making adjustments]**Adjusting the servo system controller and related parts****1. Setting the system codes**

Replacement of IC702 E²PROM requires the following data to be set in this order.

[Procedure]

Set the unit to the VCR mode and set the data for each address.

Code	1. Model code		2. Destination code			3. Specifications code		4. Menu selection code		5. Software switching code		6. Calendar switching	
Address	01	09		02	0A	03	0B	04	0C	05	0D	07	0F
Data	00	FF	S	0A	F5	14	EB	00	FF	00	FF	00	FF
			E	0B	F4								
			H	0D	F2								

When replacing the IC702 E²PROM, first make the following settings and then start the adjustments.

(1) Electromagnetic conversion

Address	27	28	2B	*105	25	26
Data	40	90	90	80	40	90

* The address uses only when replacing the IC302.

• Adjustment with automatic machine

Mode	VCR ADJ mode
Procedure	1) Using the 12 command, set the VCR adjustment mode. 2) Using the 20 command, give the E ² PROM Write permission. 3) Set the system code with the 22 command for each type. 4) Using the command, set write inhibition. 5) Using the command, cancel the adjustment mode.
Examples	• During E ² PROM (IC702) replacement.

• Manual adjustment

Mode	VCR ADJ mode
Procedure	1) Set the CAM/OFF/VCR selection switch to VCR. 2) Press "CONTINUE" → "VCR adjustment" on the remote controller to set the VCR adjustment mode. (At this time an indication "VCR ADJ" appears at the left lower side.) Enter a setting corresponding to the address. <Setting method> 3) Adjust the address by moving up and down the blinking numeral with the FF and REW key, and fix the address by pressing the PB key. 4) Adjust to the setting by moving up and down the blinking numeral with the FF or REW key, and set data by pressing the PB key. 5) Press the STOP key to set the address set state. 6) Repeat the operations 3), 4) and 5) as much as input addresses. After completion of input of all items hold down the "CONTINUE" key to cancel the VCR adjustment mode. 7) Set the CAM/OFF/VCR selection switch to OFF.
Examples	• During E ² PROM (IC702) replacement.

2. HSWP adjustment

Mode	VCR ADJ mode
Procedure	1) Play back the alignment tape in the video mode. 2) Press the "CONTINUE" and "HSWP ADJ" keys on the adjustment remote control in this order. → This executes the HSWP adjustment. When the adjustment is successful, the LCD lights up [OK] and the cassette is automatically ejected. If not properly adjusted, the LCD lights up [NG].
Examples	• During mechanism replacement. • During E ² PROM replacement (IC302 inside the head amplifier circuit board).

3. SHUT OFF adjustment

Mode	VCR ADJ mode
Procedure	1) Load a recordable tape, and set the camera mode. 2) Press the "CONTINUE" and then the "TEST SEL" on the remote control for adjustment to enter the TEST mode (T-01 blinks). 3) Select T-03 with the FF or REW key and then press the PB key. 4) Observing the power voltage from TL900(-), set it so that TL904(+) obtains 6.00V ± 50mV. 5) Press the PB key on the main unit. Turn off the power and the adjustment is completed.
Examples	• During microcomputer (IC701) or E ² PROM (IC702) replacement.

• Mechanism Error Message

When an error occurs (while "EJECT THE CASSETTE", is displayed.), hold down the "STOP" key for about 3 seconds to see what kind of error occurs.

No.	Description	No.	Description
E007	CAP FG is not input for more than 1 second.	E020	DRUM FG is not input for more than 100 m/sec.
E011	Though L/M rotates in the forward direction for more than 5 seconds (or 10 seconds), the set does not enter the next mode.	E025	The TU reel sensor is activated.
		E026	The SU reel sensor is activated.
E012	Though L/M rotates in the reverse direction for more than 5 seconds (or 10 seconds), the set does not enter the next mode.		

Note: E020, 025 or 026 occurs often due to scratches on the tape, condensation, etc. rather than due to trouble of the set. Therefore, if E020, 025 or 026 occurs, be sure to take out the cassette, and then play it back again to check whether the set operates properly.

ADJUSTING THE ELECTROMAGNETIC CONVERSION CIRCUIT SYSTEM

1. PLL VCO adjustment

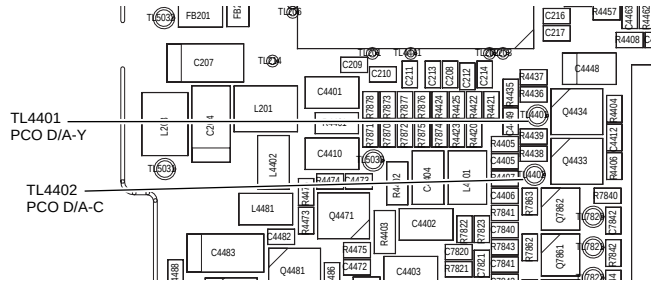
Mode	VCR ADJ mode
Procedure	1) Playback the alignment tape (or a self-recorded tape). 2) Call the adjustment mode (V-ADJ). 3) Set the address "2A" and call the data. 4) Set the called data with the FF/REW key to the point where the playback screen appears. (At this time, the screen full of block noise is OK.)
Examples	• During E ² PROM replacement. • During circuit board (Main) replacement.

2. Phase and equalizer adjustment → (Performed in the VCR mode)

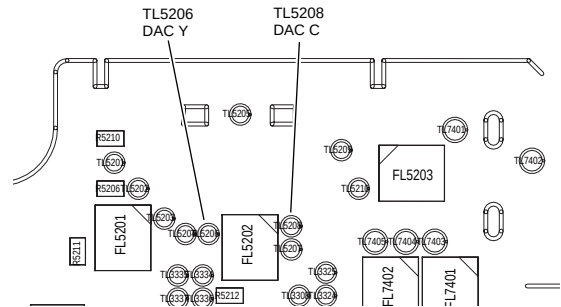
Mode	VCR ADJ mode											
Procedure	1) Load a self-recorded tape into the deck. 2) After playback for 3 minutes, select the test mode 0F using the remote control for adjustment to start the automatic adjustment. (The following sequence is automatically performed.) The built-in VI/O colour bar is recorded. ⇒ VS REW ⇒ PB ⇒ Phase and equalizer are adjusted automatically. ⇒ Judgment OK: Blue LCD comes on. ⇒ Tape is EJECT. NG: Red LCD comes on. 3) Error rate check Select and fix the TEST MODE 0B on the adjustment remote control. 4) Manual adjustment method (video adjustment mode) * Perform this adjustment with the self-recording/playback in the LP mode. For phase, vary the data for the address 26 and 2B, and for equalizer, vary the data for the address 25 and 27 to set the error rate is made as small as possible. <table><tr><td></td><td>Phase</td><td>Equalizer</td></tr><tr><td>H ch side</td><td>2B</td><td>27</td></tr><tr><td>L ch side</td><td>26</td><td>25</td></tr></table> Synchronization error Error rate H L Synchronization error Error rate 20 or less 200 or less (SP Mode) 330 or less (LP Mode) <tr><td>Examples</td><td> • During mechanism replacement. • During circuit board (Main) replacement. • During E²PROM replacement. </td></tr>		Phase	Equalizer	H ch side	2B	27	L ch side	26	25	Examples	• During mechanism replacement. • During circuit board (Main) replacement. • During E²PROM replacement.
	Phase	Equalizer										
H ch side	2B	27										
L ch side	26	25										
Examples	• During mechanism replacement. • During circuit board (Main) replacement. • During E²PROM replacement.											

ADJUSTING THE VIDEO I/O CIRCUIT SYSTEM

(Wiring board diagram: Main1 Side A)



(Wiring board diagram: Main2 Side B)



1. PCO D/A-Y adjustment

Test point	TL4401 (connected to oscilloscope)	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the address to "22", and call the data. (100% white signal is output.) 4) Vary the data with the FF and REW keys to set the signal appearing at TL4401 to $0.5\text{Vp-p} \pm 0.025\text{Vp-p}$.		
Examples	• During E ² PROM replacement. • During IC4401 replacement.		

2. PCO D/A-C adjustment

Test point	TL4402	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the addresses C0/C1/C2/C3 to 90/E6/80/80, respectively. 4) Set the address to "23", and call the data. 5) Vary the data with the FF and REW keys to set the signal appearing at TL4402 to $0.52\text{Vp-p} \pm 0.05\text{Vp-p}$. 6) Reset the addresses C0/C1/C2/ C3 to FF.		
Examples	• During E ² PROM replacement. • During IC4401 replacement.		

3. DAC Y adjustment

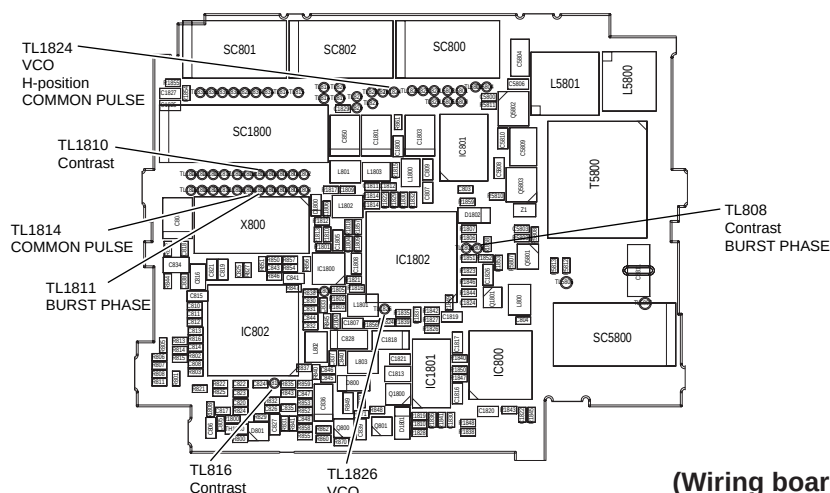
Test point	TL5206 (connected to oscilloscope)	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the address to "2D", and call the data. (100% white signal is output.) 4) Vary the data with the FF and REW keys to set the signal appearing at TL5206 to $1.0\text{Vp-p} \pm 0.05\text{Vp-p}$.		
Examples	• During E ² PROM replacement. • During IC4401 replacement. • During IC1401 replacement.		

4. DAC C adjustment

Test point	TL5208	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the address to "24", and call the data. 4) Vary the data with the FF and REW keys to set the signal appearing at TL5208 to $0.64 \pm 0.05\text{Vp-p}$.		
Examples	• During E ² PROM replacement. • During IC4401 replacement. • During IC1401 replacement.		

ADJUSTING THE LCD CIRCUIT

* To make this adjustment, set the backlight switch to the "NORMAL" position.



(Wiring board diagram: LCD Side A)

1. Contrast adjustment

Test point	TL1810 (G-OUT)	Address	81
Mode	VCR AV input		
Procedure	1) Set the data of the address 85 to 80. 2) Input white 100% as an AV input. 3) Connect TL808 to GND. (The 1H inversion stop) 4) Connect 220 K Ω between TL1816 and GND. 5) Seeing the waveform of TL1810 (G-OUT), make an adjustment between the white peak and the sync tip.		
Adjustment rating	3.0V $\pm$ 0.1V		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		

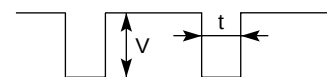


2. VCO adjustment

Test point	TL1824	Address	89
Mode	VCR AV input		
Procedure	1) Connect TL1826 to GND. (Free run mode) 2) Connect the Frequency counter to TL1824 and adjust it.		
Adjustment rating	15.625kHz $\pm$ 100kHz		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		

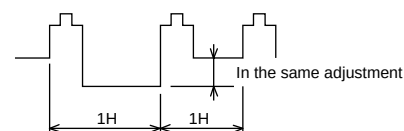
3. H-position adjustment

Test point	TL1824	Address	84
Mode	VCR AV input		
Procedure	1) Input the white 100% signal as an AV input. 2) Connect the oscilloscope to TL1824, and adjust the pulse width.		
Adjustment rating	3.3 μ sec $\pm$ 0.15 μ sec		
Examples	• During E ² PROM (IC801) replacement. • During LCD controller IC (IC1802) replacement.		



4. BURST PHASE adjustment

Test point	TL1811	Address	E7
Mode	VCR AV input		
Procedure	1) Input the monochrome signal (R) into AV input. 2) Connect TL808 to GND. (The 1H inversion stop) 3) Set the data of the address E6 to 30. 4) Minimize the signal level difference of TL1811 every 1H.		
Adjustment rating	$\pm$ 400mV		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		



5. COMMON PULSE adjustment

Test point	TL1814	Address	88
Mode	VCR AV input		
Procedure	1) Set the data of address 85 at the address 80. 2) Input the white 100% signal as an AV input. 3) Connect the oscilloscope to TL1824, and adjust the pulse width.		
Adjustment rating	6.3Vp-p $\pm$ 0.1Vp-p		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		

6. COM-BIAS adjustment

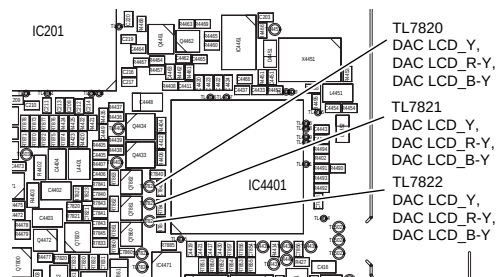
Test point	LCD panel display surface	Address	8A
Mode	VCR AV input		
Procedure	1) Input the white 40% signal as an AV input, and set data of address 85 at the address 80. 2) Set the illuminometer (TOPCON IM-3) on the LCD panel surface (do not allow entry of external light). (Shut off the external light.) 3) Connect the illuminometer to the oscilloscope. 4) Make an adjustment so as to minimize the ripple of output waveform. Response time: 0.6 sec 5) Adjust again if longitudinal stripe appears evidently. * Or set to the point where the black is settled deepest with the grey scale signal.		
Adjustment rating	Minimum		
Remark	Make this adjustment after 5-minute or longer aging.		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		

7. White Balance adjustment

Test point	LCD panel display surface	Address	82, 83
Mode	VCR AV input		
Procedure	1) White fade signal input. 2) Adjust so as to get the same white fade screen as that of standard monitor.		
Adjustment rating	Standard monitor		
Remark	Make this adjustment after 5-minute or longer aging.		
Examples	• During E ² PROM (IC801) replacement. • During LCD decoder IC (IC802) replacement.		

MAIN2 (VIDEO I/O ENG DAC CIRCUIT)

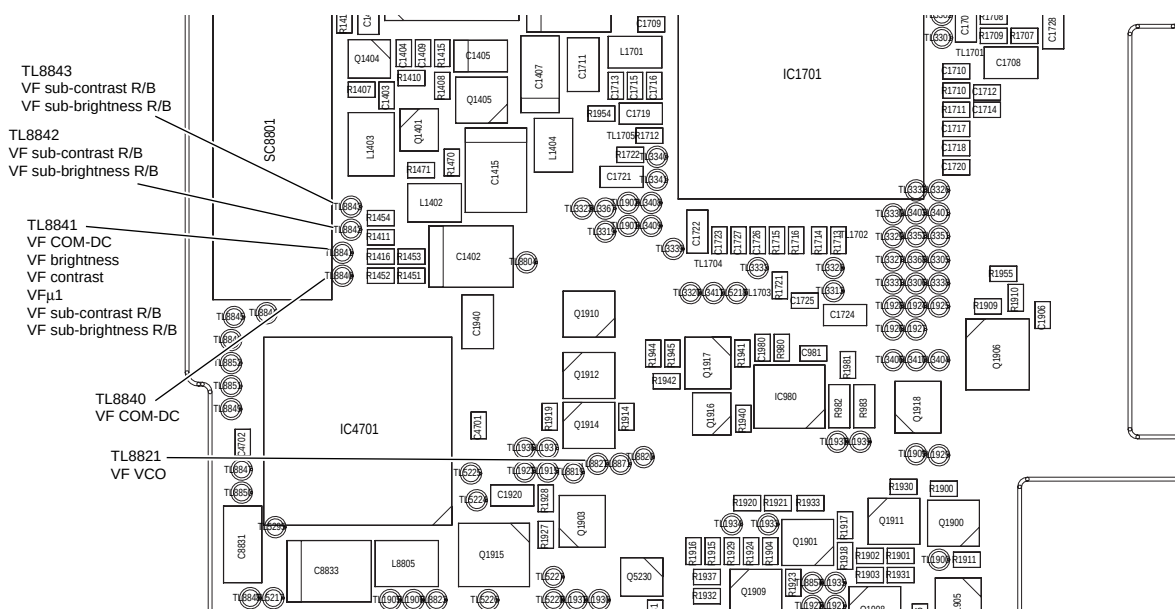
(Wiring board diagram: Main1 Side A)



8. DAC LCD_Y adjustment, DAC LCD_R-Y adjustment, DAC LCD_B-Y adjustment

Test point	TL7820(Y OUT), TL7821(R-Y OUT), TL7822(B-Y OUT)	Mode	CAM
Address	VCR ADJ 3D(Y), VCR ADJ 3E(R-Y), VCR ADJ 3F (B-Y)		
Procedure	1) Change the address C0/C1/C2/C3/C9 to 90/EB/80/80/00. 2) Adjust the output voltage of TL7820 with the address 3D and the DC voltage with a digital voltmeter to the adjustment standard value. 3) Adjust the output voltage of TL7821/TL7822 with the address 3E/3F and the DC voltage with a digital voltmeter to the adjustment standard value. (The same as (2)) 4) Return the address C0/C1/C2/C3/C9 to its former state. Note: When changing C9 FF to 00, the OSD display of LCD/VF disappears. Observing the monitor output, make the adjustment. Be sure to return it to FF after adjustment.		
Adjustment rating	0.450V $\pm$ 5mV (Y OUT), 0.252V $\pm$ 2mV (R-Y OUT), 0.319V $\pm$ 2mV (B-Y OUT)		
Examples	• During IC4401, IC4701 or IC702 replacement.		

(Wiring board diagram: Main2 Side B)



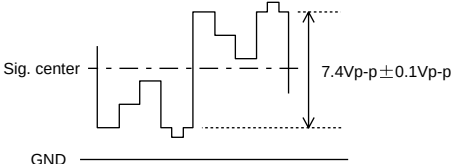
9. VF VCO adjustment

Test point	TL8821	Address	VCR ADJ 32
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Connect TL8821 to a digital voltmeter and adjust the DC voltage with the address 32 to the adjustment standard value.		
Adjustment rating	1.85 ± 0.1V		
Examples	• During IC702 or IC8800 replacement.		

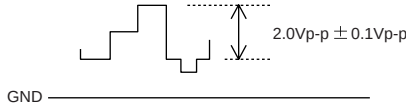
10. VF COM-DC adjustment

Test point	TL8840(VCOM)	Address	89
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Read the output of TL8841(VG) and the DC voltage with a digital voltmeter ($V_{G_{DC}}$). 3) Read the output of TL8840(VCOM) and the DC voltage with a digital voltmeter ($V_{COM_{DC}}$). 4) Make the adjustment so that ($V_{COM_{DC}} - V_{G_{DC}}$) is within the adjustment rating.		
Adjustment rating	$-0.15 \pm 0.1V$		
Examples	During IC702 or IC8800 replacement.		

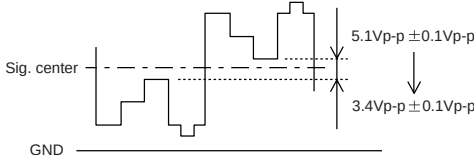
11. VF brightness adjustment

Test point	TL8841(VG)	Address	VCR ADJ 80
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Change VCR ADJ:8C to 1F. 3) Adjust the waveform of TL8841(VG) between pedestals to the specified level. 4) Return VCR ADJ:8C to the former state.		
Adjustment rating	7.4Vp-p $\pm$ 0.1Vp-p 		
Examples	During IC702 or IC8800 replacement.		

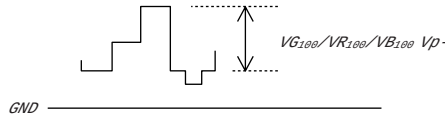
12. VF contrast adjustment

Test point	TL8841(VG)	Address	VCR ADJ 83
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Change VCR ADJ:8C to 1F. 3) Set the address 86/87 to FF. 4) Adjust the waveform of TL8841(VG) between pedestal and 100% to the specified level. 5) Return VCR ADJ:8C to the former state.		
Adjustment rating	$2.0V_{p-p} \pm 0.1V_{p-p}$ 		
Examples	• During IC702 or IC8800 replacement.		

13. VF γ 1 adjustment

Test point	TL8841(VG)	Address	VCR ADJ 87
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Change VCR ADJ:8C to 1F. 3) Adjust the waveform of TL8841(VG) between white 100% and white 100% with VCR ADJ:87 to $5.1 \pm 0.1V_{p-p}$. 4) Then adjust the same waveform with VCR ADJ:83 to $3.4 \pm 0.1V_{p-p}$. 5) Return VCR ADJ:8C to the former state.		
Adjustment rating	$5.1 \pm 0.1V_{p-p}$ (VCR ADJ:87) $3.4 \pm 0.1V_{p-p}$ (VCR ADJ:83) 		
Examples	• During IC702 or IC8800 replacement.		

14. VF sub-contrast R/B adjustment

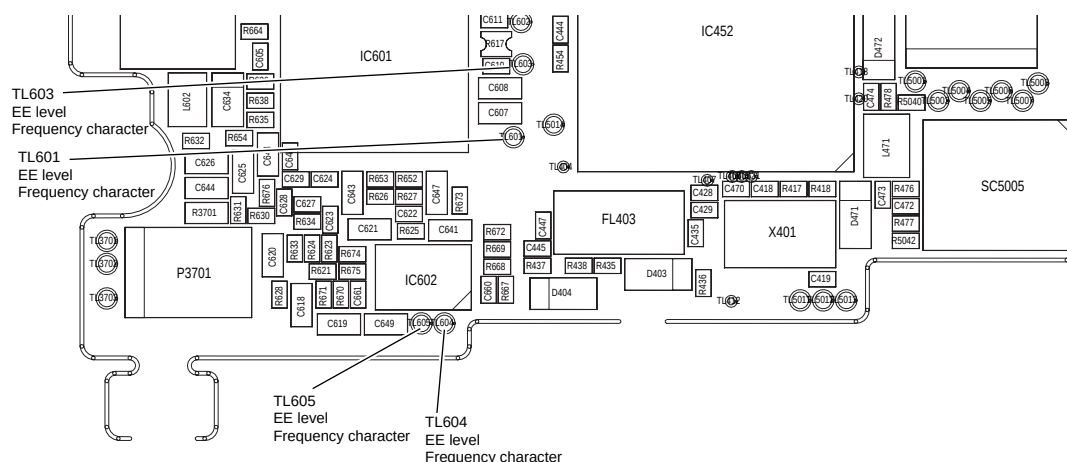
Test point	TL8842(VR), TL8841(VG), TL8843(VB)	Address	VCR ADJ 84(VR), VCR ADJ 85(VB)
Mode	VCR AV input		
Procedure	1) Use 3-STEP staircase wave as an input signal. 2) Adjust the 100% waveform of TL8841(VG) and TL8842(VR) between amplitudes to the specified level. 3) Adjust the 100% waveform of TL8841(VG) and TL8843(VB) between amplitudes to the specified level.		
Adjustment rating	$0 \pm 40mV(VR_{100} - VG_{100})$, $0 \pm 40mV(VB_{100} - VG_{100})$ 		
Examples	• During IC702 or IC8800 replacement.		

15. VF sub-brightness R/B adjustment

Test point	TL8842(VR), TL8841(VG), TL8843(VB)	Address	VCR ADJ 81(R), VCR ADJ 82(B)
Mode	VCR AV input		
Procedure	1) Input white 40% signal into the AV input and standard monitor. 2) Adjust it with the VCR ADJ address 81/82 so as to obtain the same color as the standard monitor.		
Adjustment rating	Standard monitor		
Examples	• During IC702 or IC8800 replacement.		

ADJUSTING THE MIC AMP CIRCUIT

(Wiring board diagram: Main1 Side A)



1. EE level check

Measuring instrument	Valve voltmeter	Test point	TL605, TL604
Mode	P-ON (CAM)	Adjustment rating	-8.5dBs ± 3dB
Test signal	1kHz -54dBs sine wave		
Procedure	1) Input 1kHz, -54dBs sine wave into TL601(INT MIC L) and TL603(INT MIC R). 2) Make sure that the signal level of TL605 Audio-L out and TL604 Audio-R out is within the standard limits.		
Remark			

2. Frequency character check

Measuring instrument	Valve voltmeter	Test point	TL605, TL604
Mode	P-ON (CAM)	Adjustment rating	(1kHz standard) 100Hz: -12dBs ± 3dB 10kHz: 0dBs ± 3dB
Test signal	100Hz, 10kHz -54dBs sine wave		
Procedure	1) Input 100Hz, -54dBs sine wave and then 10kHz, -54dBs sine wave into TL601(INT MIC L) and TL603(INT MIC R). 2) At this time make sure that the signal level of TL605 Audio-L out and TL604 Audio-R out is within the standard limits (1kHz standard).		
Remark			

DV INTERFACE (IEEE1394) ID SETTING

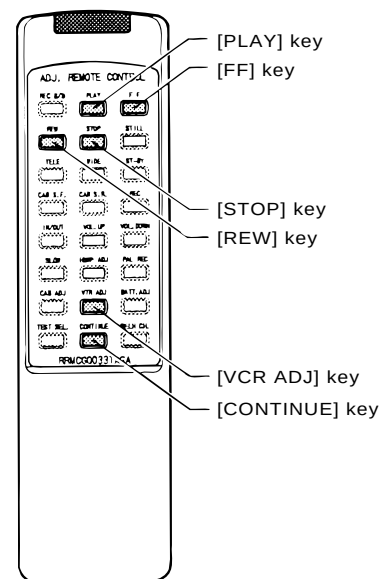
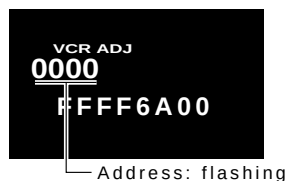
If ID code is acquired, it is written by the following point.

Example) Acquisition code : 08001F0100123456

Address	180	17F	17E
Data(ID code)	12	34	56

• Procedures for Entering IEEE1394 Numbers

- Set the power switch to the "VCR" position.
- Press "CONTINUE" on the adjustment remote control, then press "VCR ADJ" and the address you chose will appear on the LCD monitor.
- With "FF" or "REW" the desired address will appear. Set with "PLAY" and data entry will show.
- With "FF" or "REW" the ID number (obtained through the Intranet) for any address will appear. Set with "PLAY".
- Press "STOP" and the address selection will appear. Then you can enter your ID number in order under the given address digits (180, 17F, 17E).
- Set the power switch to the "OFF" position. Now the writing is complete.



ADJ. REMOTE CONTROL
RRMCG 0033 TASA

9-2. Camera Section Adjustments

9-2-1. Camera section service

(1) Camera adjustment is performed after the set has been completed.

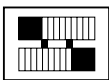
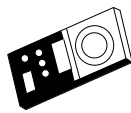
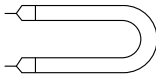
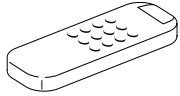
(2) Subjects, measuring instruments and jigs needed for camera section service and adjustments

• Gray scale chart • Color bar chart • Oscilloscope • Digital voltmeter • Halogen lamp: 2 pcs. • Vector scope	• Frequency counter • Illumination meter • Color temperature meter • Color temperature conversion filter HOYA "LB-165" • Color video monitor	• Video output cable • AC adapter • Extension cables • Remote control unit for servicing
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9-2-2. List of camera jigs and tools

Configuration

<Note: The entries of list> 1. Name 2. Part No. 3. Code

 1. Gray scale chart (390 x 520 mm) 2. JiGCHART-1 3. CP	 1. Color bar chart (240 x 320 mm) 2. JiGCHART-4 3. DA	 1. Illumination meter (0 to 3000 lux) 2. JiGMETER-1 3. CT	 1. Color temperature meter (1600 to 400000 degrees K) 2. JiGMETER-2 3. EL
1. Color temperature conversion filter (3200 degrees K ⇒ 6800 degrees K) 2. JiGHOYA-LB165 3. BN	 1. PC plate connector drawer 2. JiGTH-SS10 3. AW	 1. Remote control until for servicing 2. RRMCG0033TASA 3. BT	

9-2-3. Adjusting the camera unit

(1) Preparations for adjustments and items to be checked

- 1) Set up the light box so that the entire pattern is evenly lit. Set the color temperature to 3200°K.
- 2) Use test patterns that are not dirty nor discoloured.
- 3) If the electrical circuitry gets in trouble, be sure to pinpoint the trouble spot with a measuring instrument and repair or replace the defective part.

(2) Remote control for servicing RRMCG0033TASA

To adjust the camera section of this machine, the remote control for servicing (RRMCG0033TASA) is used. The adjustment is made in such a manner that the remote control writes necessary data by way of the microprocessor to the specific addresses on the E²PROM (IC702 and on the lens unit).

1) To adjust the camera:

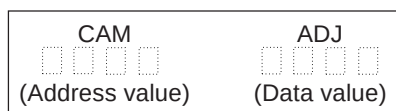
Press the "CONTINUE" key first and then the "CAM ADJ" key.

This will show



on the LCD screen, thereby having the camera unit ready for the adjustments.

2) Descriptions of the displays



(Indicates the camera adjustment mode.)

* The address values for this machine range from 0000 to 09FF.

* The data include byte data (the last two digits are effective) and 2-byte data (the last three digits are effective).

3) Descriptions of the remote control keys

"FF" key: Increases the address and data values.

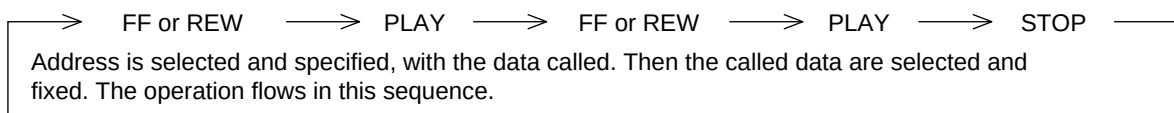
"REW" key: Decreases the address and data values.

"PLAY" key: Specifies addresses and calls the data.

This key also fixes the data values.

"STOP" key: Clears the data to enable the selection of address.

4) Operation flow



5) When the adjustment is complete:

Press the "CONTINUE" key to let the "CAM ADJ" display disappear from the screen.

Note: Before terminating the adjustments, make sure that the adjustment mode is neither the auto-focus function adjustment mode nor the camera signal system adjustment mode (these modes are mentioned later).

- Camera unit adjustment modes

The camera unit is adjusted in two types of modes: the auto-focus function adjustment mode and the camera signal system adjustment mode.

Note: Each E²PROM contains the adjustment item data as shown below. If it is changed, data rewriting and confirmation of latest data must be performed.

1) E²PROM on lens unit of camera head section

Lens data

2) E²PROM(IC702) on main unit

Signal system adjustment data

(3) Auto-focus function adjustment mode

- The camera unit uses a microprocessor-controlled auto-focus zoom lens.

The auto-focus circuit incorporated in this unit is designed to execute the image processing where the focusing action is done by taking advantage of the fact that the high-frequency components in the image signals increase as the focus intensifies. Moreover, to achieve high magnifying power with a small lens, the camera unit incorporates the inner focus system in which the focus is shifted by moving the master lens (rear lens) back and forth. This inner focus system is a full-range focus type by which the focus can be shifted from approximately 10 mm to the infinity. It should be noted, however, that since the closest subject distance at the telephoto end is fixed at 1.5 m, subjects in a closer range than 1.5 m at the telephoto end will be out of focus. For this reason, the unit is designed so the zoom control is automatically shifted to the wide angle side until the position is found where the subject can be focused on.

In the auto-focusing system of this unit, the following constitute the important factors:

- Master lens position detection data
- Iris position detection data
- Zoom lens position detection data

These detection data are handled and stored by the microprocessor, lens by lens, into the E²PROM.

Therefore, in the following cases, the auto-focus function adjustment is required:

- When the lens has been replaced
- When the CCD has been replaced
- When the E²PROM (on the lens unit) has been replaced

1) Shifting to the auto-focus function adjustment mode

Set the data for the address "09FE" to "□□ 01".



This makes the screen fade temporarily in white and shifts to the auto-focus function adjustment mode.

* When this adjustment mode has been shifted to, make the adjustment according to (5) Camera unit adjustment procedure.

* In this adjustment mode, the lens can not be operated.

2) Shifting to the normal operation mode

Set the data for the address "09FE" to "□□ FF".



This makes the screen fade temporarily in white and shifts to the normal operation mode.



Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

(4) Camera signal system adjustment mode

In the camera signal system adjustment mode, the automatic white balance is disabled to allow for the adjustment of the camera unit. At this time, the white balance mode is fixed at the INDOORS mode and the focus mode is switched to the manual focus mode.

1) Shifting to the camera signal system adjustment mode

Set the data for the address "0000" to "□□ 00".



This shifts the camera signal system adjustment mode.

* When this adjustment mode has been shifted to, make the adjustment according to (5) Camera unit adjustment procedure.

2) Shifting to the normal operation mode

Set the data for the address "0000" to "FF".

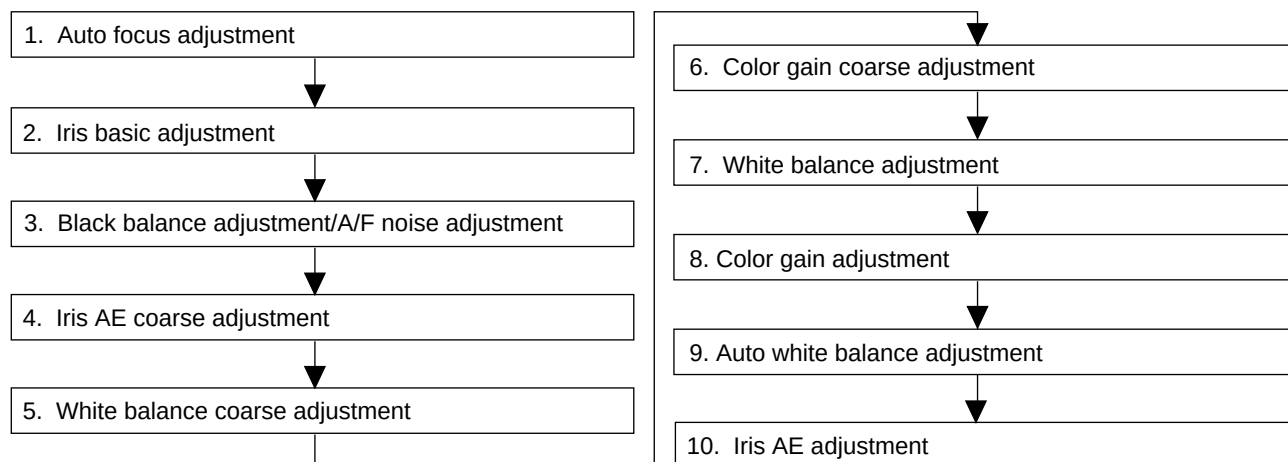


This shifts the mode to the normal operation mode.



Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

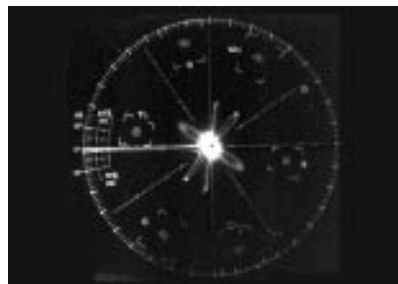
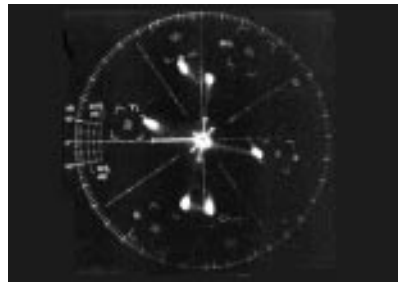
(5) Camera unit adjustment procedure

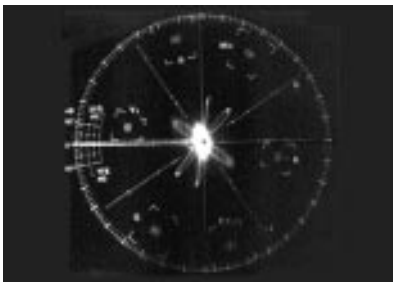
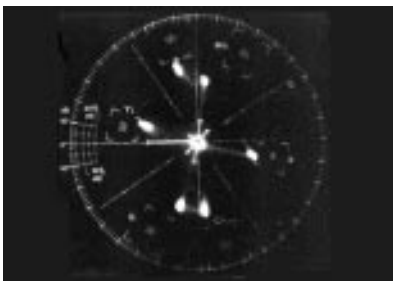
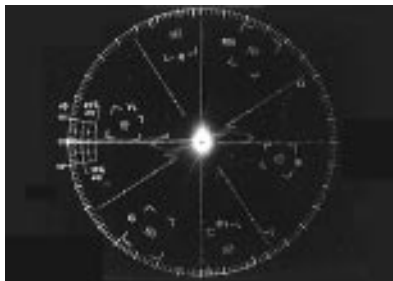
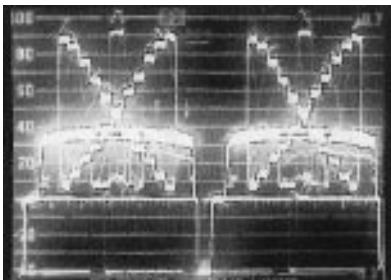


- * The above 1. Auto-focus function adjustment and 2. Iris basic adjustment are performed in the auto-focus function adjustment mode, whereas the other adjustments are made in the camera signal system adjustment mode.
- * After completing the auto-focus adjustment mode, set the camera signal system adjustment mode. (Take care that the adjustment mode transfer address is different.)

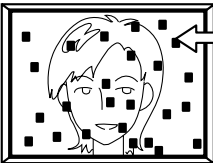
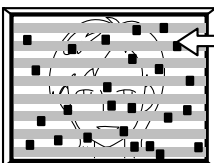
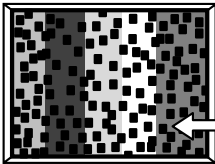
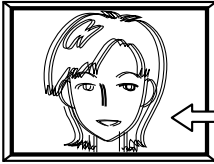
9-2-4. Adjustment procedures

Item	Adjustment method													
(1) Auto-focus adjustment	Set the unit to the auto-focus function adjustment mode and write data to the address "09FD" one after another. This executed the adjustments automatically. The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "FF" is written to the address. After each adjustment, make sure that the adjustment has been made properly, and then go on to the next adjustment item. <table><tr><th>Address</th><th>Data</th><th>Adjustment item</th></tr><tr><td rowspan="4">09FD</td><td>000C</td><td>MR sensor adjustment</td></tr><tr><td>0012</td><td>WIDE end adjustment</td></tr><tr><td>0008</td><td>TELE end focus ∞ position adjustment</td></tr><tr><td>0006</td><td>WIDE end focus ∞ position adjustment</td></tr></table> Note 1: To adjustment of ∞ position is executed by actually picking up the image of subject. For this adjustment use the subject with clear profile. Especially, if the adjustment of TELE end focus ∞ position is made without picking up the image of remote subject, adjustment failure may occur. Adjustment of WIDE end focus ∞ position: 3 m or more Adjustment of TELE end focus ∞ position: 50 m or more Note 2: In case of ∞ position adjustment the field depth is important to ensure the adjustment accuracy. If the field depth is high, the focus becomes too stable , which may cause incorrect adjustment of ∞ position. Therefore the adjustment must be made with low field depth (with iris opened). The iris can be opened with the high-speed shutter. 1. It returns to the normal operation mode. 2. In the normal operation mode, set the high-speed shutter mode until the iris is opened. (Refer to the operation manual.) 3. Display “CAM ADJ” with the remote control for service. 4. It shifts to the auto-focus adjustment mode. 5. Perform the ∞ position adjustment. 6. After completing the ∞ position adjustment, return the high-speed shutter mode to the normal mode.		Address	Data	Adjustment item	09FD	000C	MR sensor adjustment	0012	WIDE end adjustment	0008	TELE end focus ∞ position adjustment	0006	WIDE end focus ∞ position adjustment
Address	Data	Adjustment item												
09FD	000C	MR sensor adjustment												
	0012	WIDE end adjustment												
	0008	TELE end focus ∞ position adjustment												
	0006	WIDE end focus ∞ position adjustment												
(2) Iris basic adjustment	This is for adjusting the operating point of the hole element installed in the iris meter of the lens. The adjustments are executed automatically by writing the data to the address "09FD" one after another in the auto-focus adjustment mode. The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "00FF" is written to the address. <table><tr><th>Address</th><th>Data</th><th>Adjustment item</th></tr><tr><td rowspan="3">09FD</td><td>0009</td><td>Hall offset adjustment</td></tr><tr><td>000A</td><td>Iris offset adjustment</td></tr><tr><td>000B</td><td>Iris close adjustment</td></tr></table> * After completion of 1. Auto-focus adjustment, 2. Iris basic adjustment once restore the regular operation mode. Data "090F" is written in the address "0003".		Address	Data	Adjustment item	09FD	0009	Hall offset adjustment	000A	Iris offset adjustment	000B	Iris close adjustment		
Address	Data	Adjustment item												
09FD	0009	Hall offset adjustment												
	000A	Iris offset adjustment												
	000B	Iris close adjustment												
(3) Black balance adjustment/A/F noise adjustment	1) In the camera signal system adjustment mode (write the data " 00 00" to the address "0000"), set the unit to the adjustment mode. 2) Prior to the adjustment, initialize the data for the addresses "0200", "0202", "0204", "0206", "0208", "020A". Write "FF FF" to all of these address. 3) Write the data " 01 01" to the address "0001" This starts the adjustment automatically. When the adjustment is completed properly, the data "00FF" is written automatically.													

Item	Adjustment method															
(4) Iris AE coarse adjustment - Measurement terminal: S terminal luminance signal output (75 Ω termination) - Address: "0002" AE_CVT - Measuring instrument: Oscilloscope (horizontal sync) - Object: Grey scale - Data variation width: "0000" to "00FE"	(1) Video output is observed with the oscilloscope in the grey scale standard record state, the data of address "0002" is rewritten, and the luminance signal level is adjusted white to $720 \pm 10\text{mVp-p}$.  100mV/div															
(5) White balance coarse adjustment - Measurement terminal: EE output - Address: "0050" CGAIN_KR_W "0052" CGAIN_KB_W - Measuring instrument: Vector scope - Object: Grey scale - Data variation width: "0000" to "03FF"	(1) Indication on the vector scope is observed in the grey scale standard record state, data of address "0050" and "0052" are rewritten, and an adjustment is made so that the luminous dot is located in the position of burst ratio: R-Y $0 \pm 5\%$ B-Y $0 \pm 5\%$ 															
(6) Color gain coarse adjustment - Measurement terminal: EE output - Address: "02DE" CGIN_RYG "02E0" CGIN_BYG "02DB" CMAT_RYG "02D9" CMAT_BYG - Measuring instrument: Vector scope - Object: Color bar chart - Data variation width: "0000" to "00FF"	(1) The color bar chart is imaged, and the picture angle is adjusted so as to get white level 700 mV. Indication on the vector scope is observed, the data of address "02DE", "02E0", "02DB" and "02D9" are rewritten, and setting is made so that the red and blue luminous dots are located in the following positions. (The gain of vector scope must be set on 75% amplitude point on the B-Y axis.)  <table><tr><td></td><td></td><td>Adjustment address</td></tr><tr><td>Red amplitude</td><td>2.10 ± 0.1 time (burst ratio)</td><td>: "02DE"</td></tr><tr><td>Blue amplitude</td><td>2.10 ± 0.1 time (burst ratio)</td><td>: "02E0"</td></tr><tr><td>Red phase</td><td>$104^\circ \pm 2^\circ$</td><td>: "02DB"</td></tr><tr><td>Blue phase</td><td>$348^\circ \pm 2^\circ$</td><td>: "02D9"</td></tr></table>			Adjustment address	Red amplitude	2.10 ± 0.1 time (burst ratio)	: "02DE"	Blue amplitude	2.10 ± 0.1 time (burst ratio)	: "02E0"	Red phase	$104^\circ \pm 2^\circ$	: "02DB"	Blue phase	$348^\circ \pm 2^\circ$	: "02D9"
		Adjustment address														
Red amplitude	2.10 ± 0.1 time (burst ratio)	: "02DE"														
Blue amplitude	2.10 ± 0.1 time (burst ratio)	: "02E0"														
Red phase	$104^\circ \pm 2^\circ$	: "02DB"														
Blue phase	$348^\circ \pm 2^\circ$	: "02D9"														

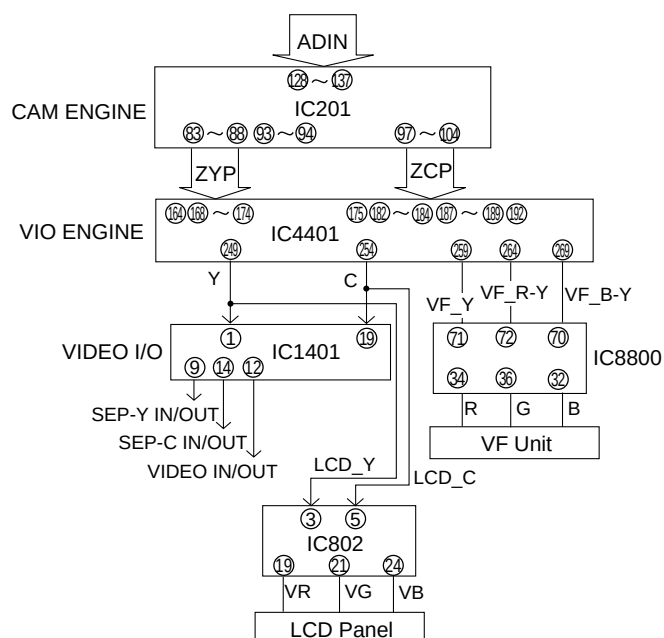
Item	Adjustment method															
(7) White balance adjustment - Measurement terminal: EE output - Address: "0050" INDOOR_W/B R "0052" INDOOR_W/B R - Measuring instrument: Vector scope - Object: Grey scale - Data variation width: "0000" to "03FF"	(1) White balance adjustment is performed repeatedly. 															
(8) Color gain adjustment - Measurement terminal: EE output - Address: "02DE" CGIN RYG "02E0" CGIN BYG "02DB" CMAT RYG "02D9" CMAT BYG - Measuring instrument: Vector scope - Object: Waveform monitor color bar chart - Data variation width: "0000" to "00FF"	(1) Color gain adjustment is performed repeatedly.  <table><tr><td></td><td></td><td>Adjustment address</td></tr><tr><td>Red amplitude</td><td>2.10 ± 0.05 time (burst ratio)</td><td>: "02DE"</td></tr><tr><td>Blue amplitude</td><td>2.10 ± 0.05 time (burst ratio)</td><td>: "02E0"</td></tr><tr><td>Red phase</td><td>$104^\circ \pm 1^\circ$</td><td>: "02DB"</td></tr><tr><td>Blue phase</td><td>$348^\circ \pm 2^\circ$</td><td>: "02D9"</td></tr></table>			Adjustment address	Red amplitude	2.10 ± 0.05 time (burst ratio)	: "02DE"	Blue amplitude	2.10 ± 0.05 time (burst ratio)	: "02E0"	Red phase	$104^\circ \pm 1^\circ$	: "02DB"	Blue phase	$348^\circ \pm 2^\circ$	: "02D9"
		Adjustment address														
Red amplitude	2.10 ± 0.05 time (burst ratio)	: "02DE"														
Blue amplitude	2.10 ± 0.05 time (burst ratio)	: "02E0"														
Red phase	$104^\circ \pm 1^\circ$	: "02DB"														
Blue phase	$348^\circ \pm 2^\circ$	: "02D9"														
(9) Auto white balance adjustment - Measurement terminal: EE output - Address: "000C" OUTDOOR R "000E" OUTDOOR B - Measuring instrument: Vector scope - Object: Grey scale - Data variation width: "0000" to "03FF"	(1) The color temperature conversion filter (LB165) is mounted in front of lens. (2) Indication of vector scope is observed in the grey scale standard record state, and an adjustment is made so that the luminous dots are located in the following positions: <table><tr><td>R-Y</td><td>$0 \pm 5\%$ (burst ratio)</td></tr><tr><td>B-Y</td><td>$0 \pm 5\%$ (burst ratio)</td></tr></table> 	R-Y	$0 \pm 5\%$ (burst ratio)	B-Y	$0 \pm 5\%$ (burst ratio)											
R-Y	$0 \pm 5\%$ (burst ratio)															
B-Y	$0 \pm 5\%$ (burst ratio)															
(10) Iris AE adjustment - Measurement terminal: S terminal luminance signal output (75 Ω termination) - Address: "0002" AE_CVT - Measuring instrument: Oscilloscope (horizontal sync) - Object: Grey scale - Data variation width: "0000" to "00FE"	(1) Set the unit to the normal operation mode (write the data "FF" to the address "0000"). (2) Video output is observed with the oscilloscope in the grey scale standard record state, the data of address "0002" is rewritten, and the luminance signal level is adjusted white to $660 \pm 10\text{mVp-p}$, gray of the background $320 \pm 10\text{mVp-p}$.  100mV/div															

10. USEFUL TIPS (PROBLEMS DIFFER FROM THOSE FOUND ON VHS OR 8MM DECKS BECAUSE THE SIGNALS ARE DIGITALLY PROCESSED.)

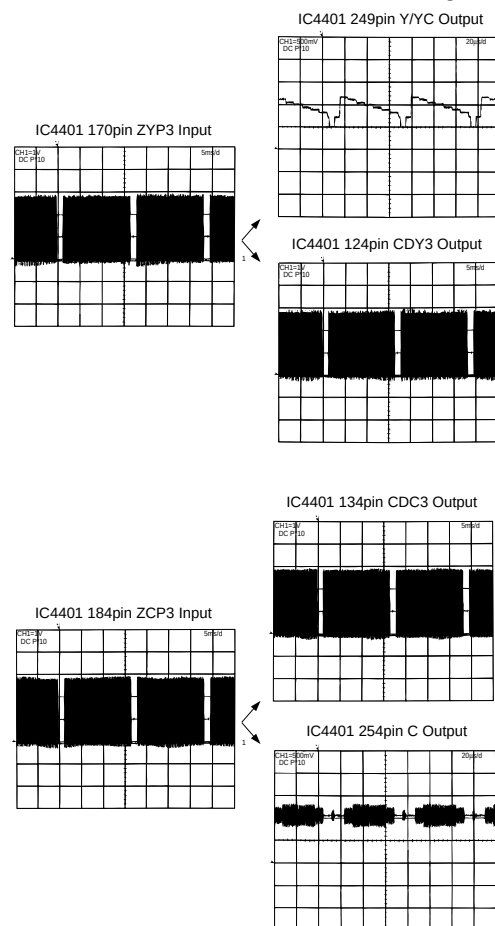
Camera (EE mode) Picture fails to appear Major circuits to be checked • CCD • Camera circuits (CDS, ADC, CAM ENGINE) • CAMERA/SYSTEM MiCON (IC701) • VIDEO I/O (IC1401) • VIO ENGINE (IC4401)	VCR (EE mode) Blueback fails to appear. Major circuits to be checked • Mechanical control Micon (IC7701) • CAMERA/SYSTEM MiCON (IC701) • CAM ENGINE (IC201) • REC/PB ENGINE (IC452)	Camera (REC mode) VCR (PB mode) Picture fails to appear when tape recorded on this unit or another unit is played back. (EE OK) Major circuits to be checked • CAM ENGINE (IC201) • REC/PB ENGINE (IC452)
Camera (REC mode) VCR (PB mode) Blueback when tape recorded on this unit or another unit is played back. (EE OK) Major circuits to be checked • EQ/PLL (IC3401) • Head amplifier (IC301) * Dirty or defective video head	Camera (REC mode) VCR (PB mode)  Random block noise when tape recorded on this unit or another unit is played back. or  Noise bar (Green) + random block noise when tape recorded on this unit or another unit is played back. Major circuits to be checked • EQ/PLL (IC3401) • Head amplifier (IC301) * Dirty or defective video head	
VCR (PB mode) + color bar Lines appear on the color bar. Major circuits to be checked • CAM ENGINE (IC201)	VCR (PB mode) + color bar  There is considerable random block noise. Major circuits to be checked • Adjustment of the electromagnetic conversion circuit system.	Camera (EE mode)  The outline looks like a Moire pattern. Major circuits to be checked • Y data between CAM ENGINE (IC201) and VIO ENGINE (IC4401) is missing.

11. SIGNAL FLOW DIAGRAMS

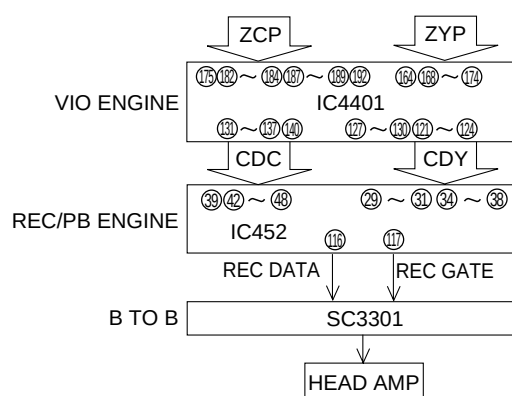
11-1. EE MODE FLOW (VIDEO)



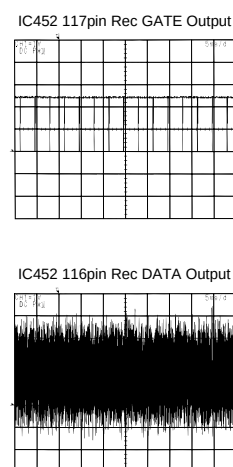
WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)



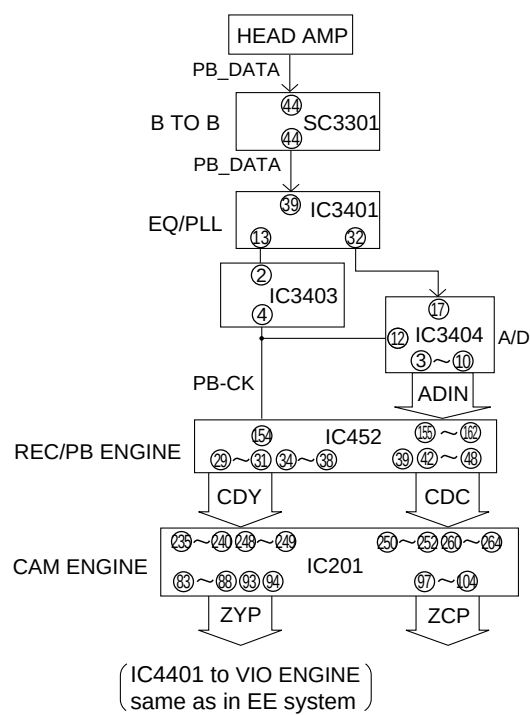
11-2. FLOW IN REC MODE (VIDEO)



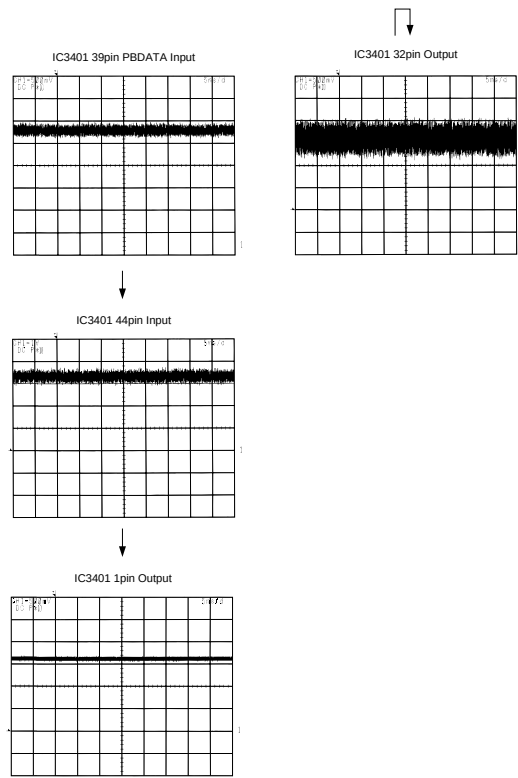
WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)



11-3. FLOW IN PB MODE (VIDEO)

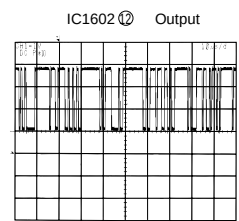
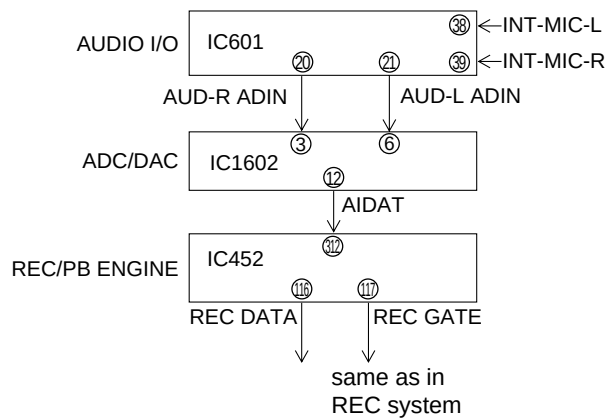


WAVEFORM DIAGRAM (DURING COLOR BAR PLAYBACK)

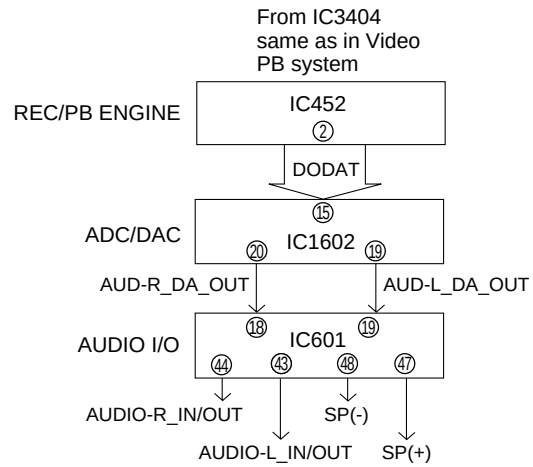


11-4. FLOW IN REC MODE (AUDIO)

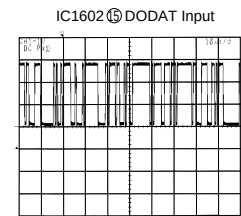
WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)



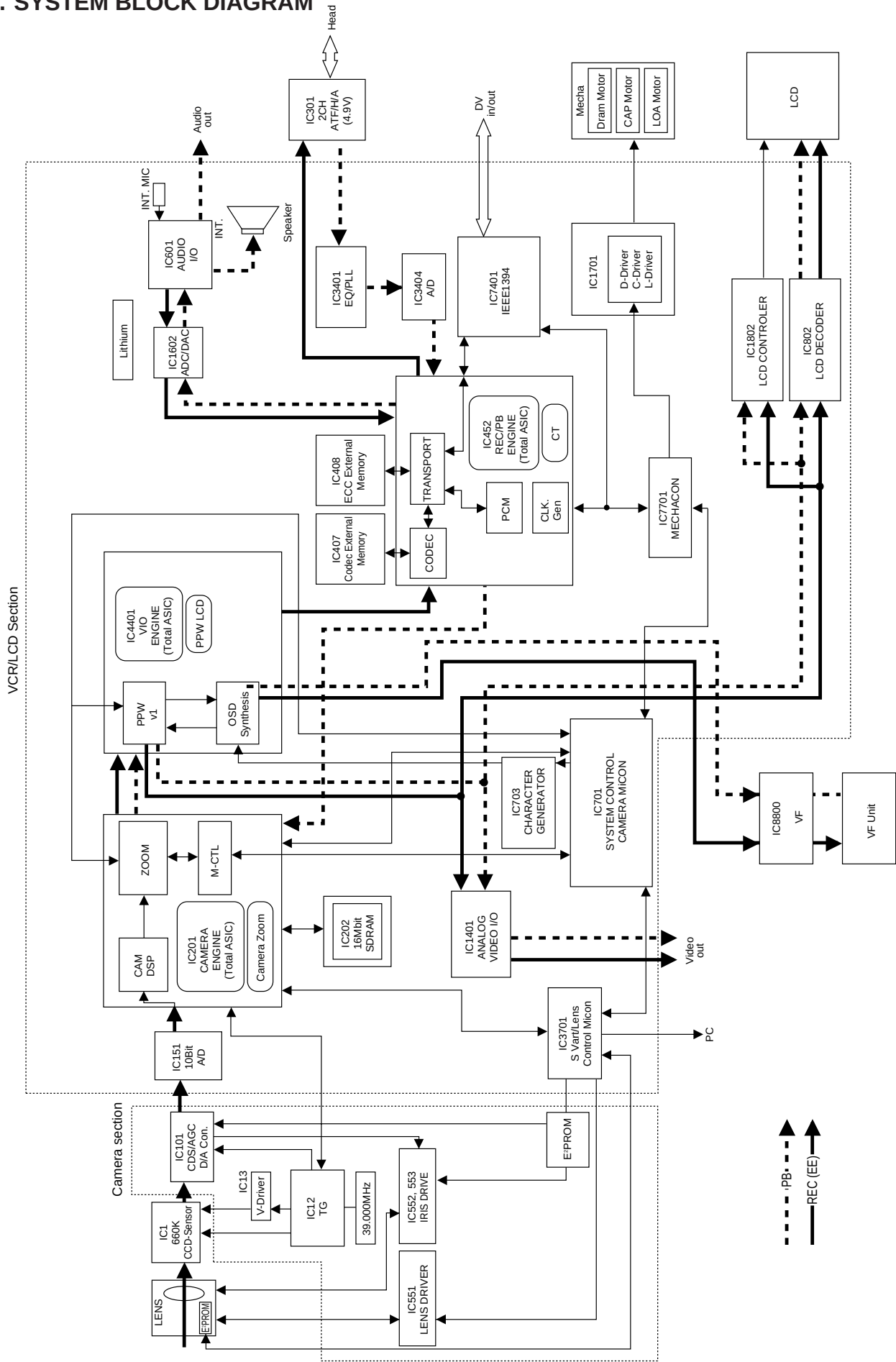
11-5. FLOW IN PB MODE (AUDIO)



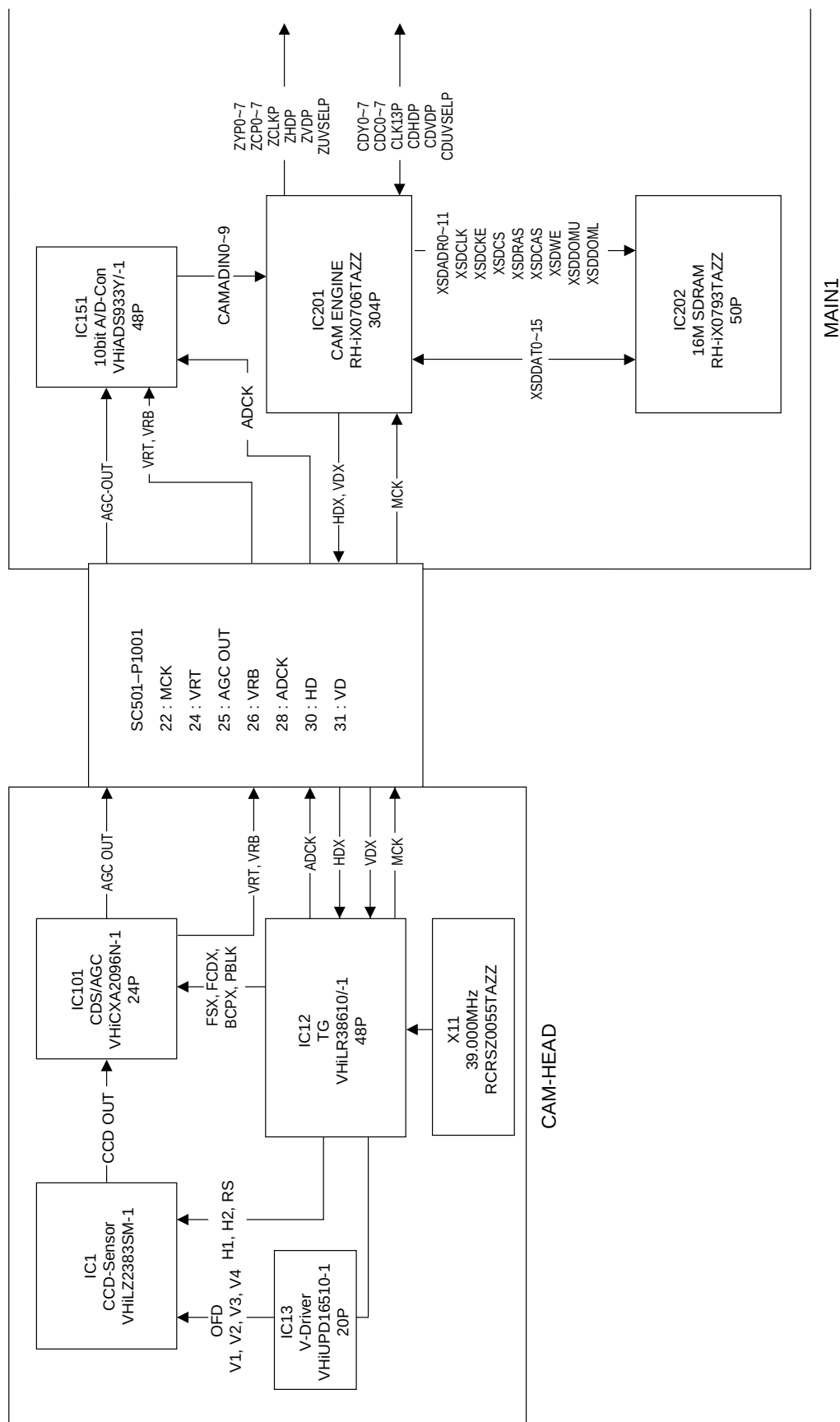
WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)



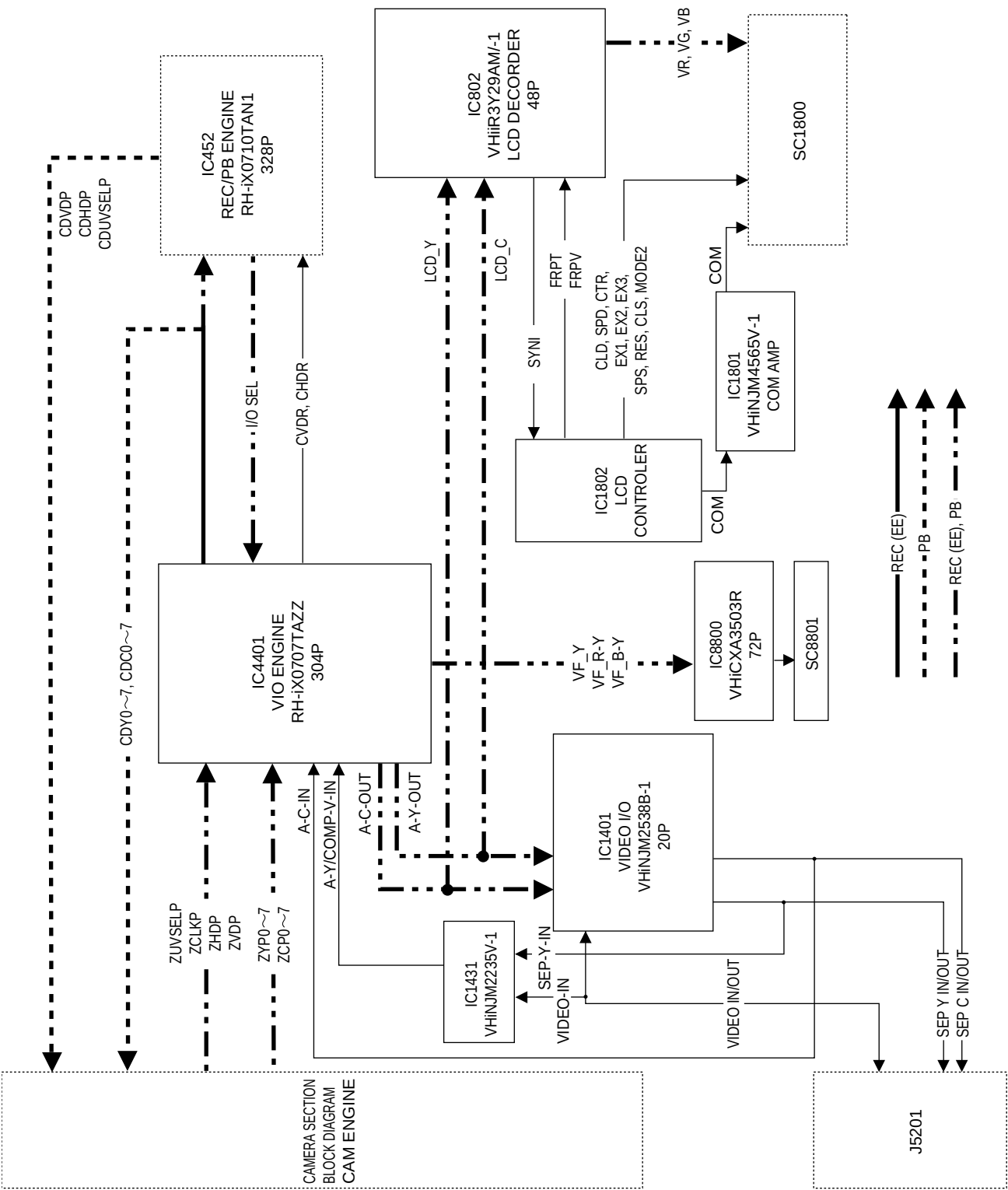
12. BLOCK DIAGRAMS
12-1. SYSTEM BLOCK DIAGRAM



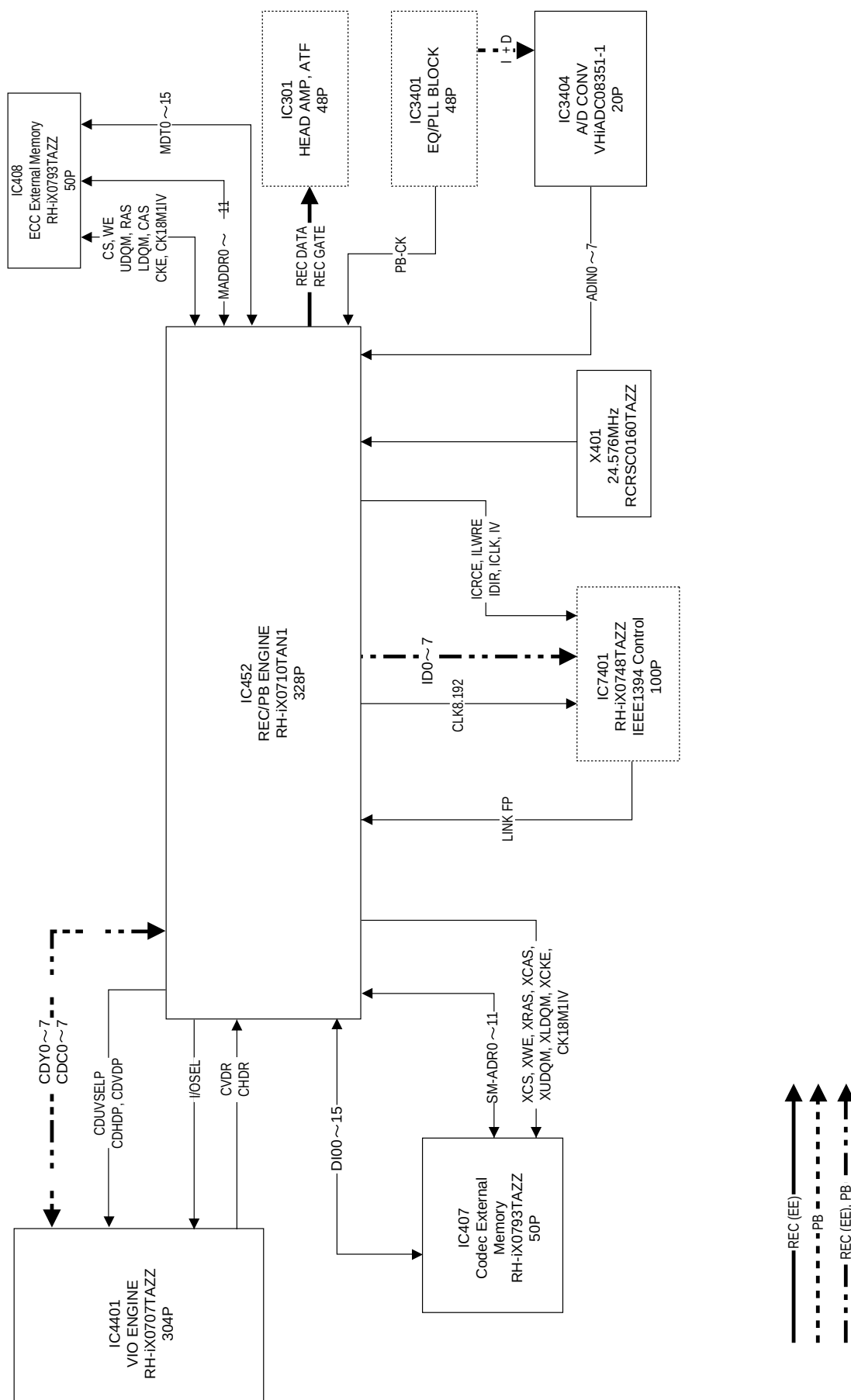
12-2. CAMERA SECTION BLOCK DIAGRAM



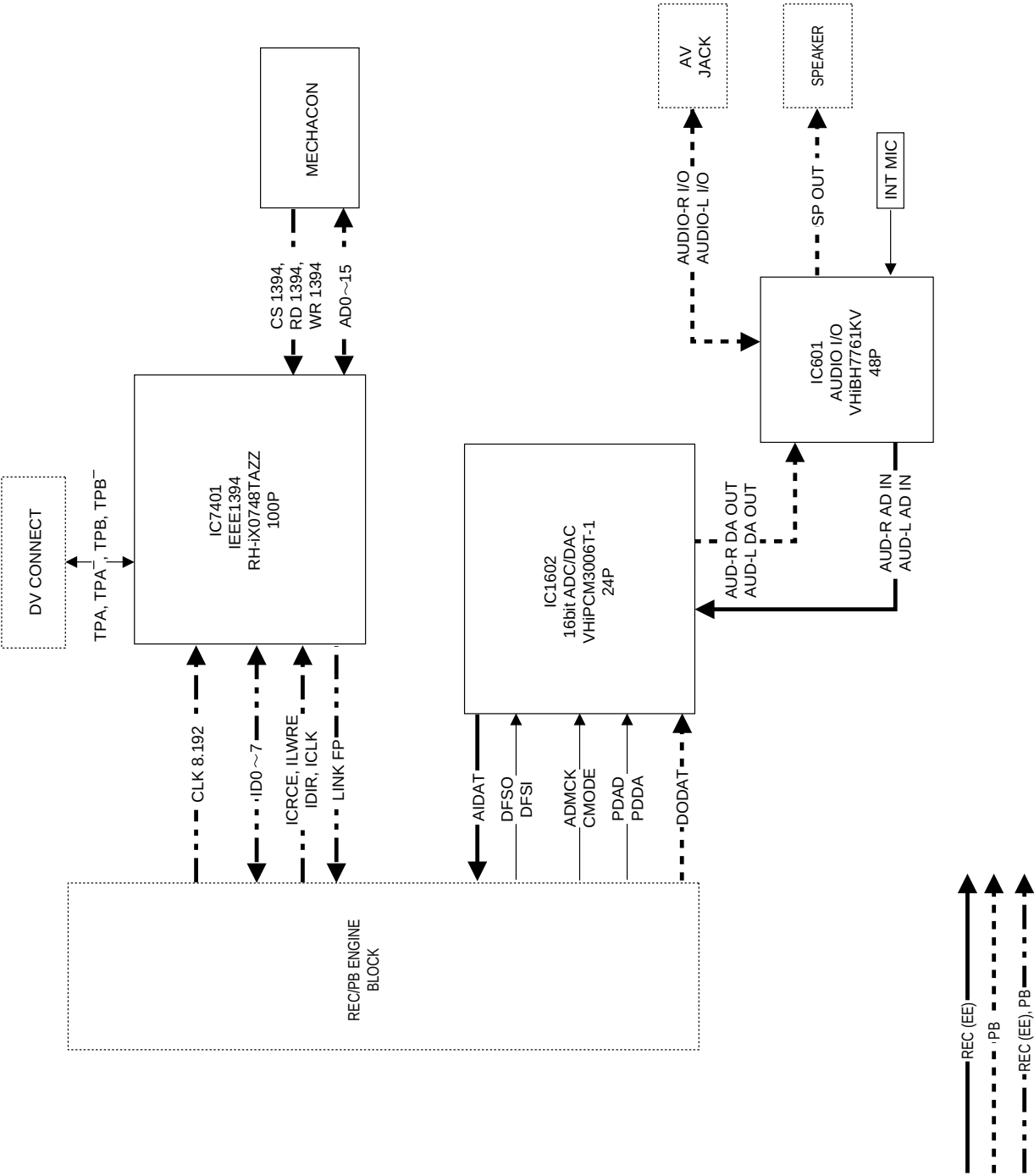
12-3. VIO ENGINE SECTION BLOCK DIAGRAM



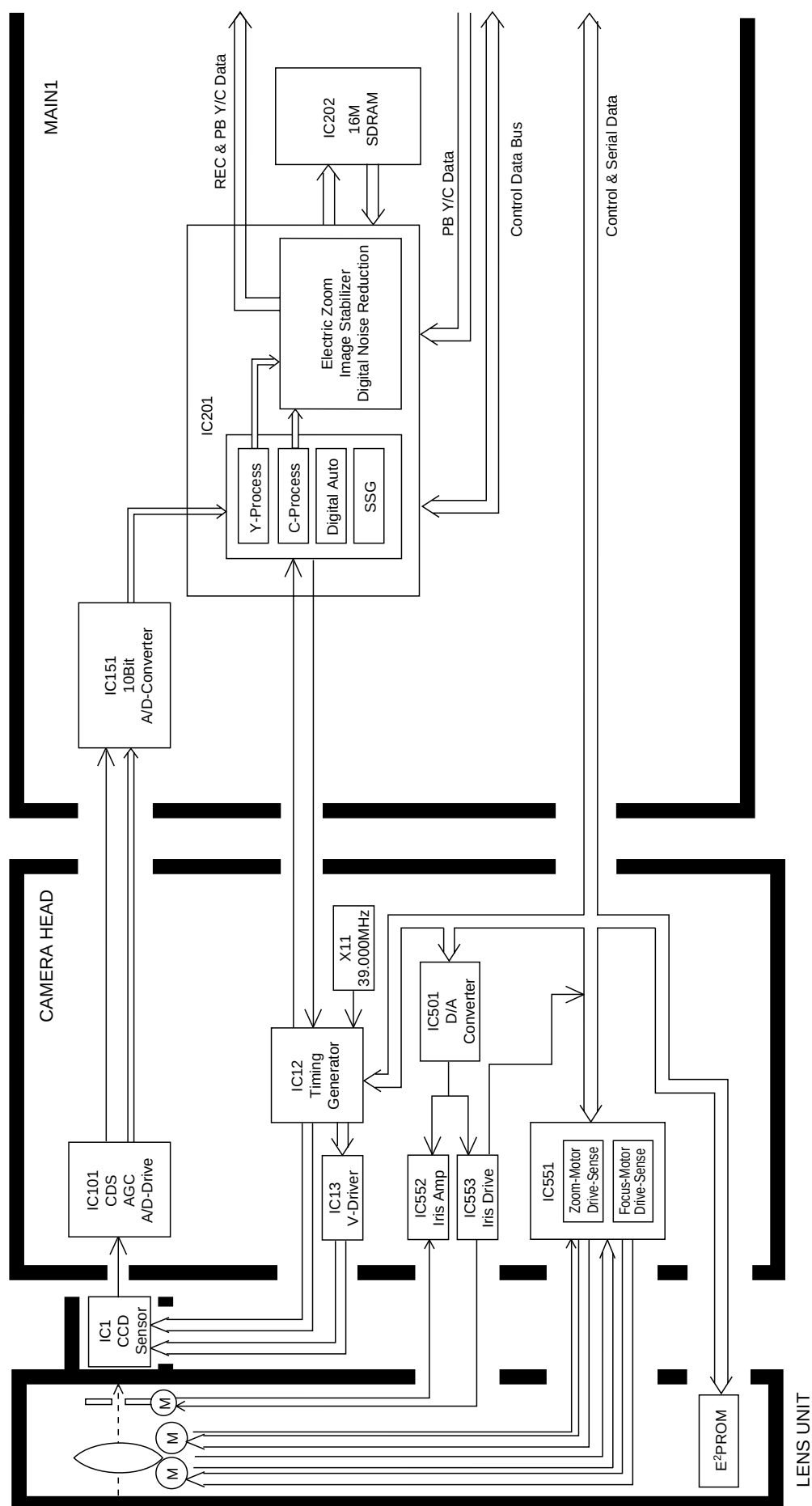
12-4. REC/PB SECTION SECTION BLOCK DIAGRAM



12-5. AUDIO/DIGITAL OUTPUT SECTION BLOCK DIAGRAM



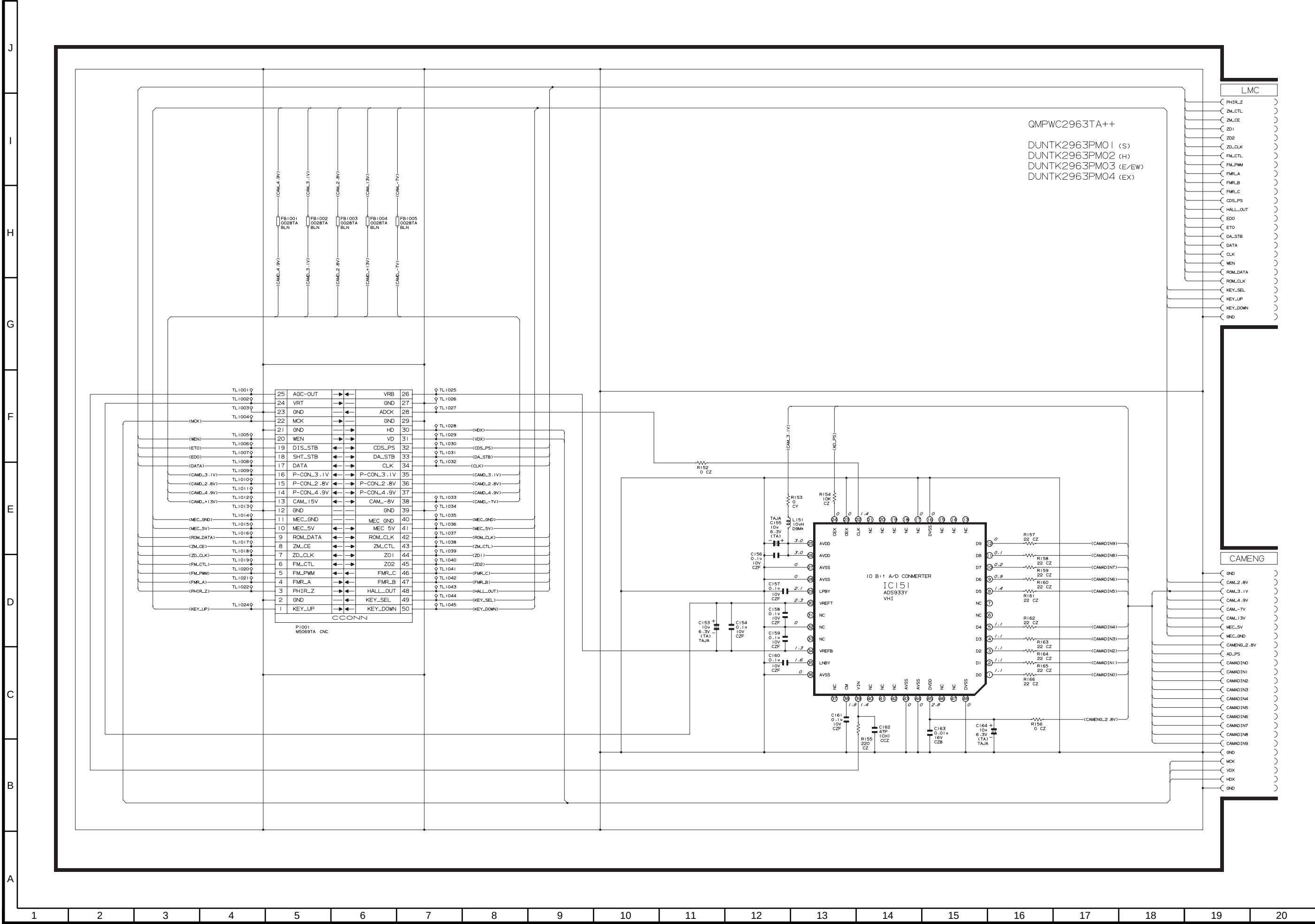
12-6. CAMERA CIRCUIT BLOCK DIAGRAM

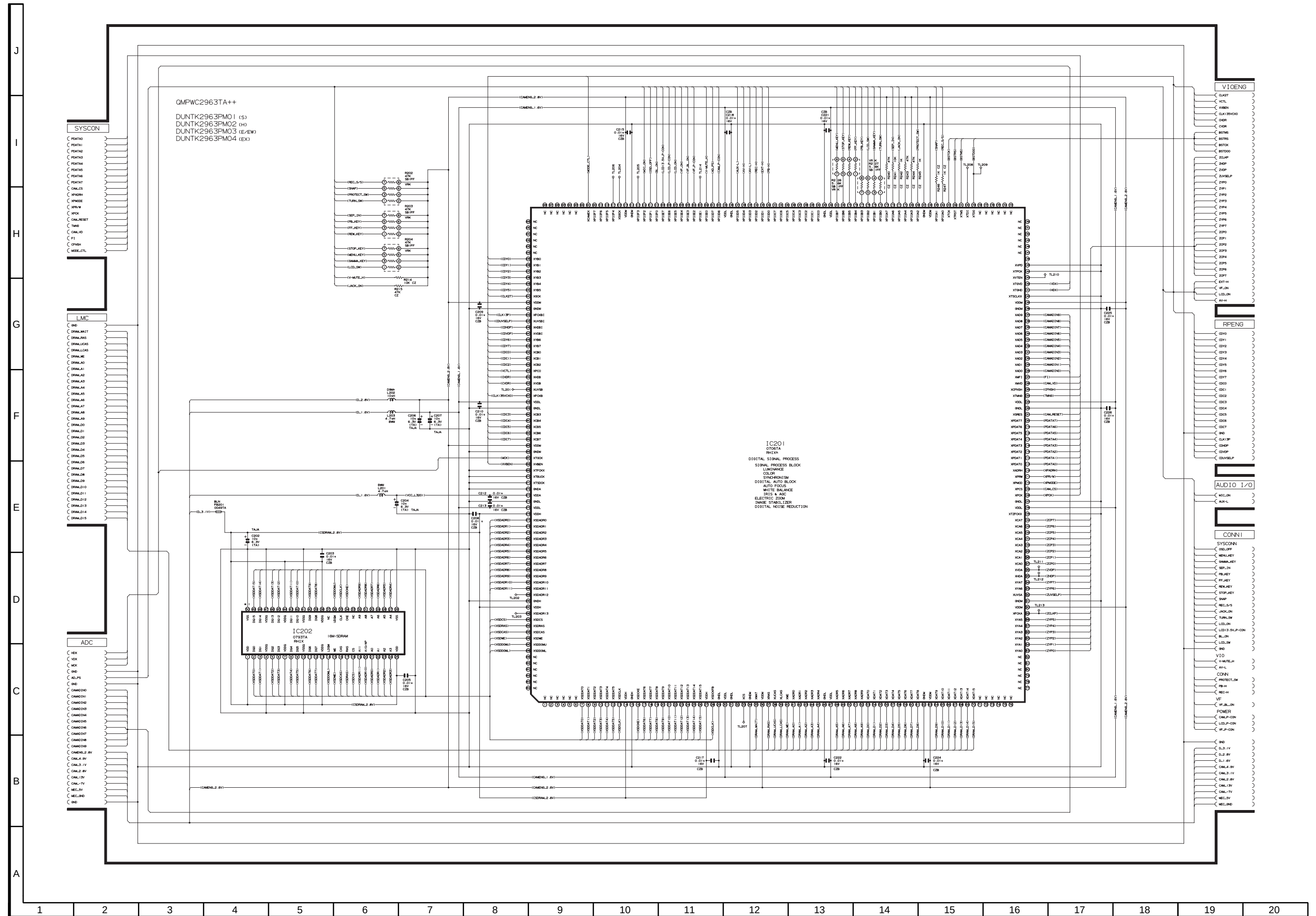


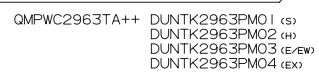


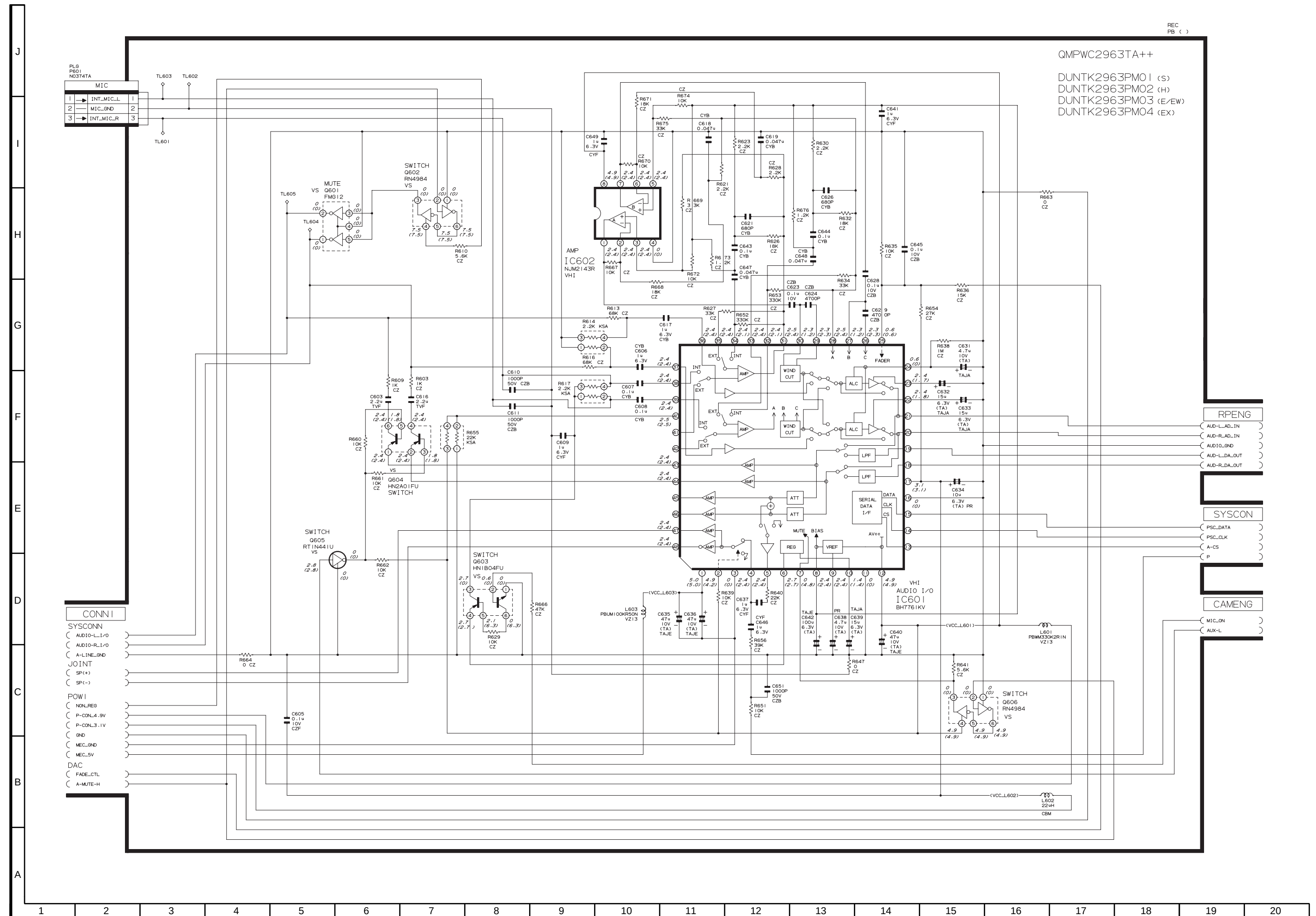
VL-PD3AS/AH/AE

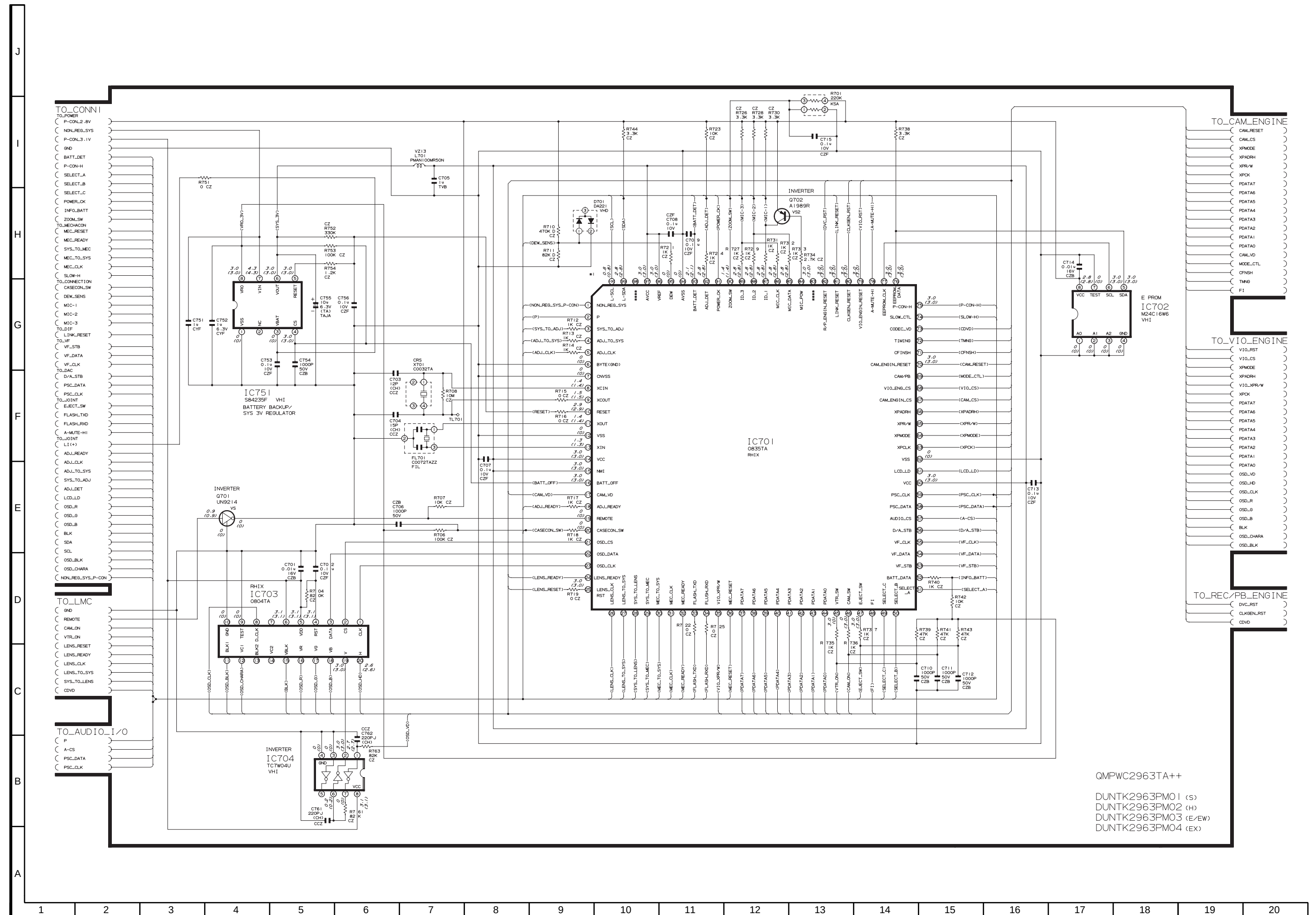
13-2. ADC SCHEMATIC DIAGRAM

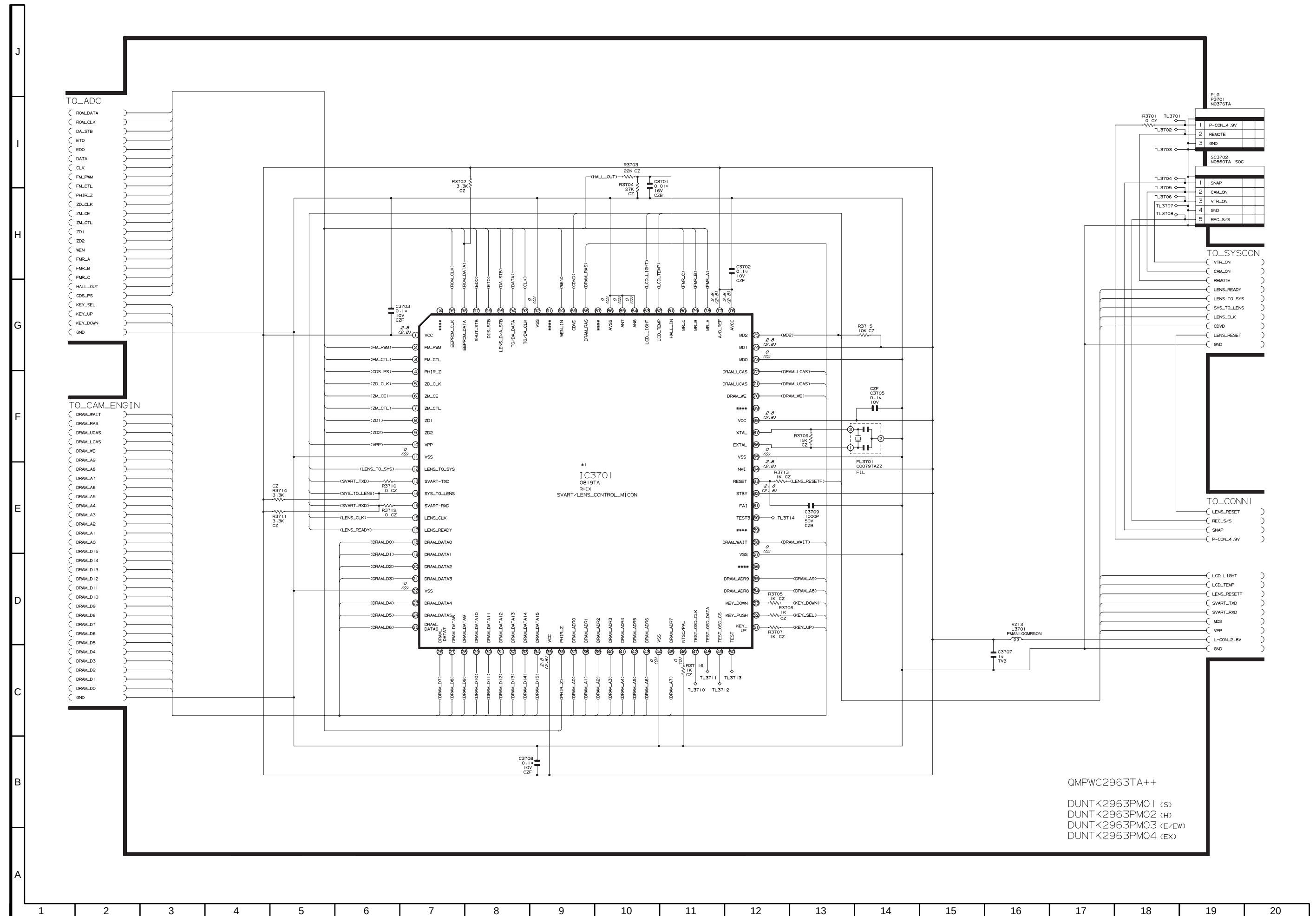




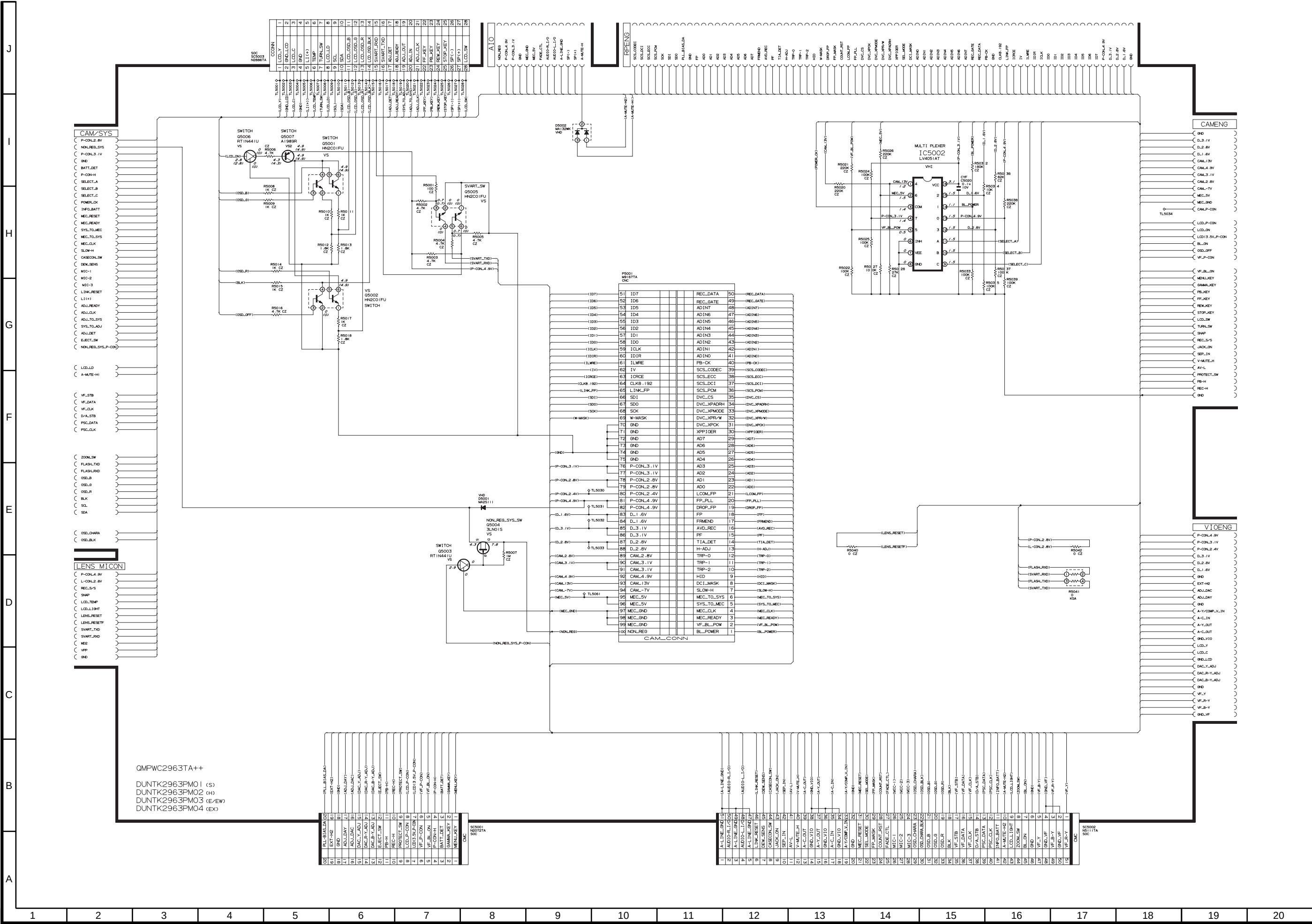




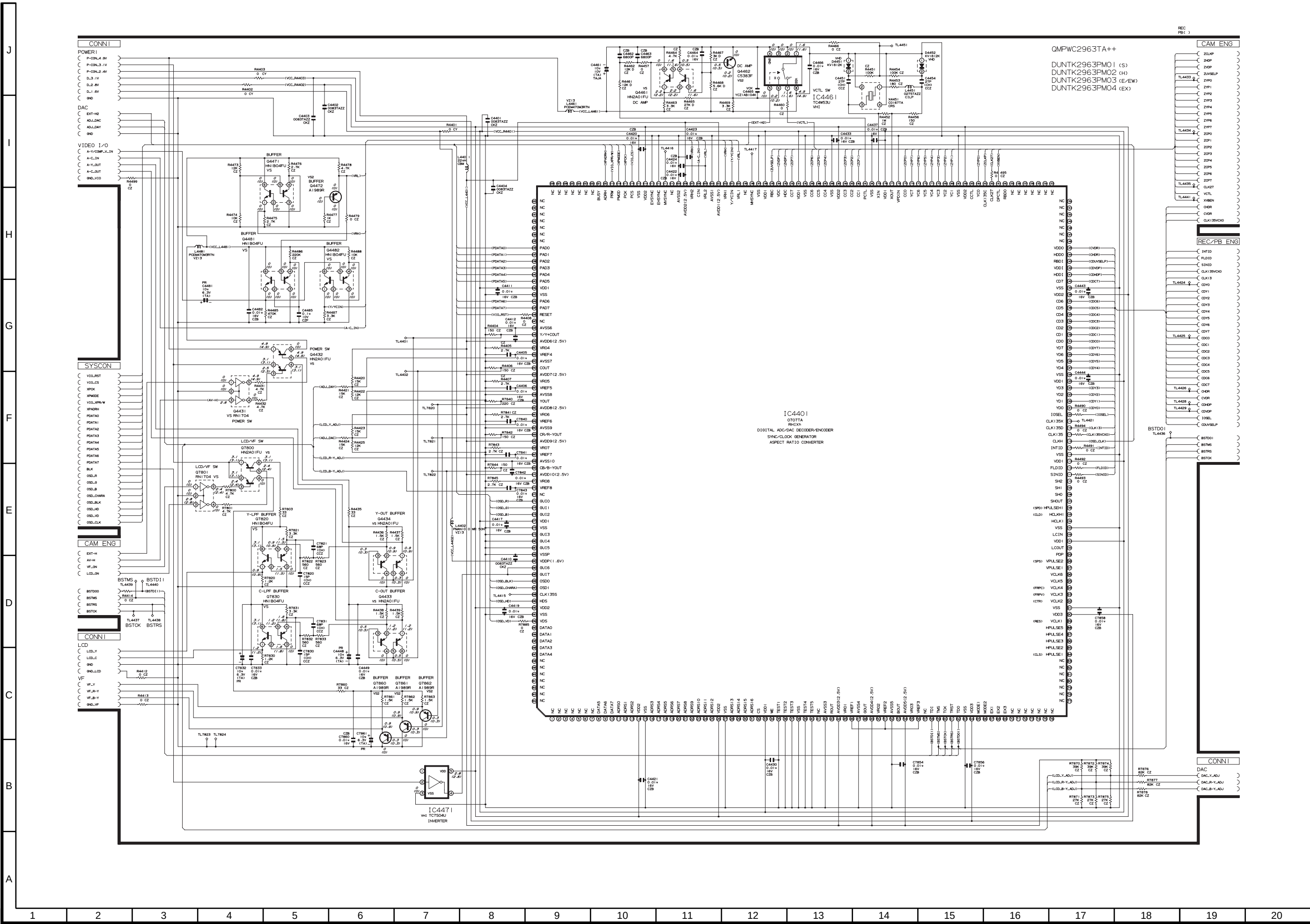




13-8.CONN1 SCHEMATIC DIAGRAM

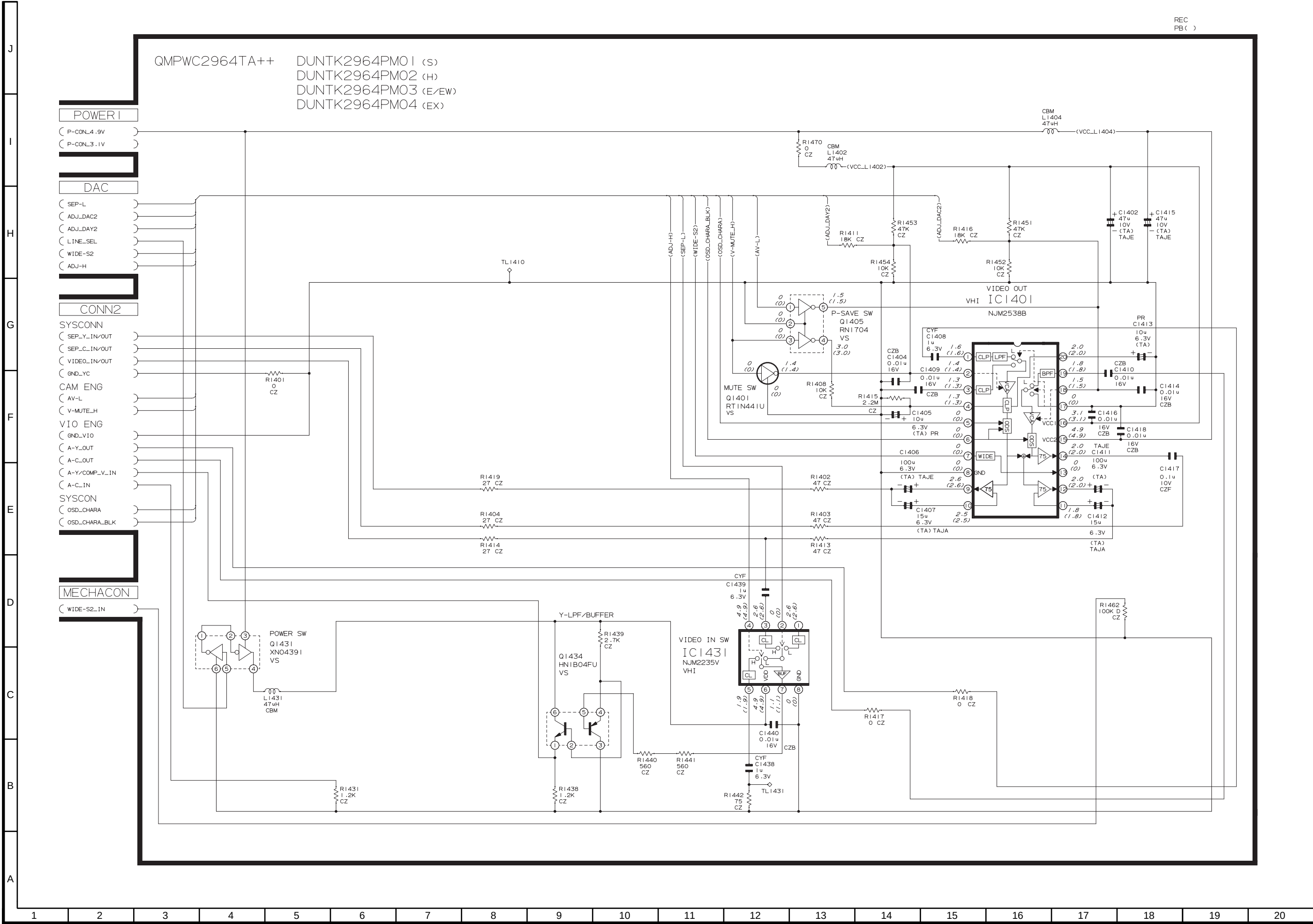


13-9. VIDEO I/O ENGINE SCHEMATIC DIAGRAM

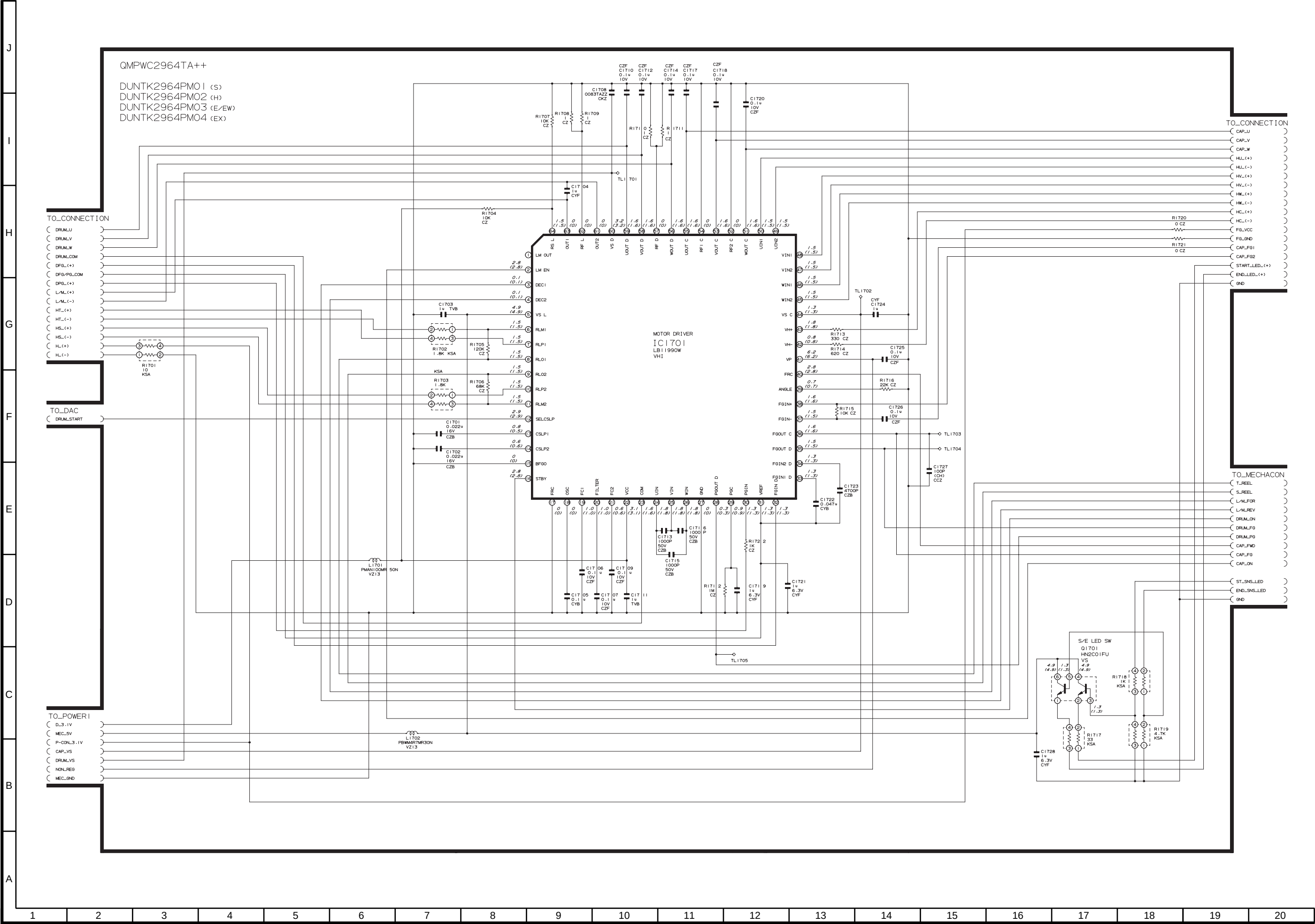


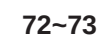
VL-PD3AS/AH/AE

13-10. VIDEO I/O SCHEMATIC DIAGRAM

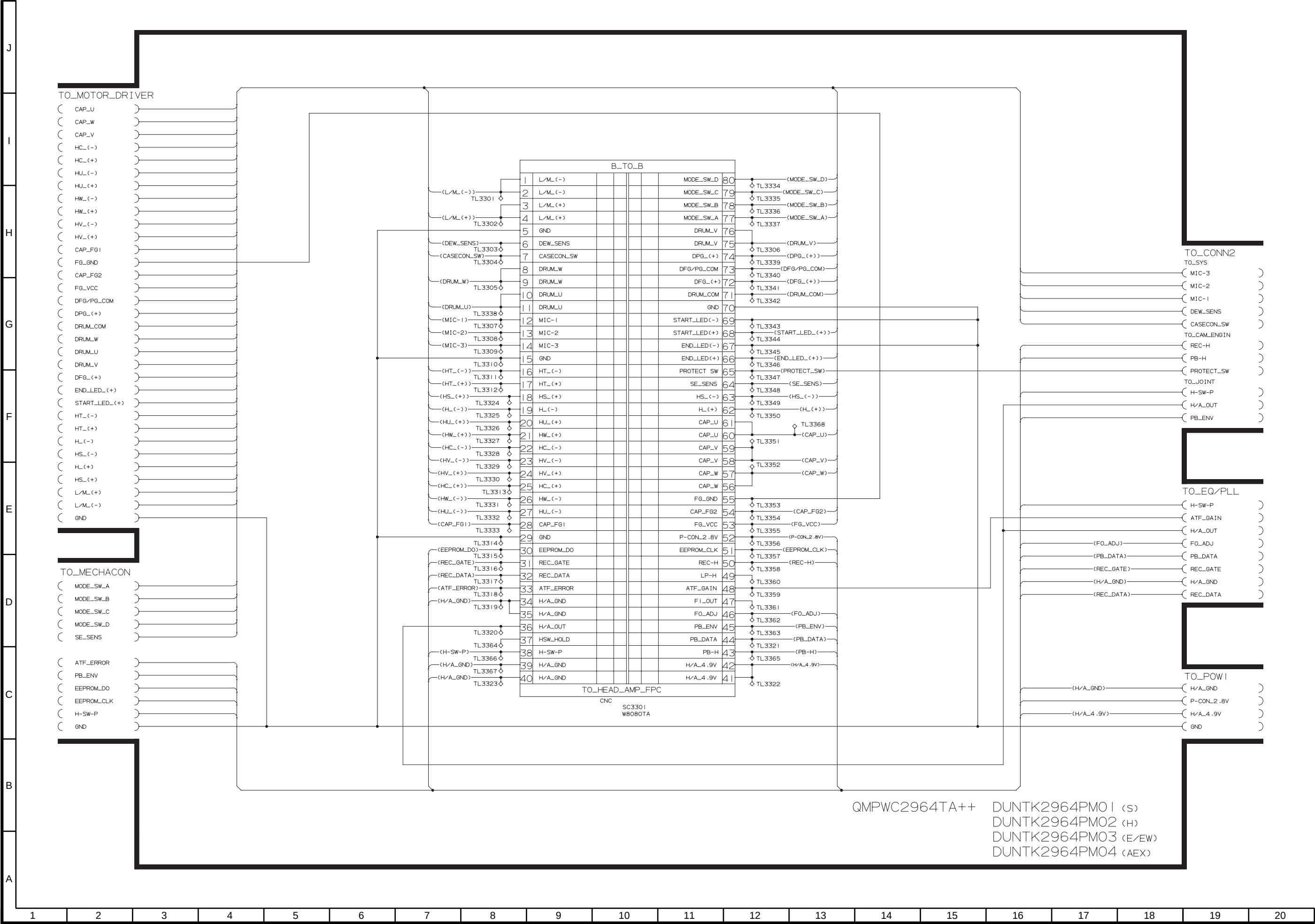


13-11. MOTOR DRIVER SCHEMATIC DIAGRAM

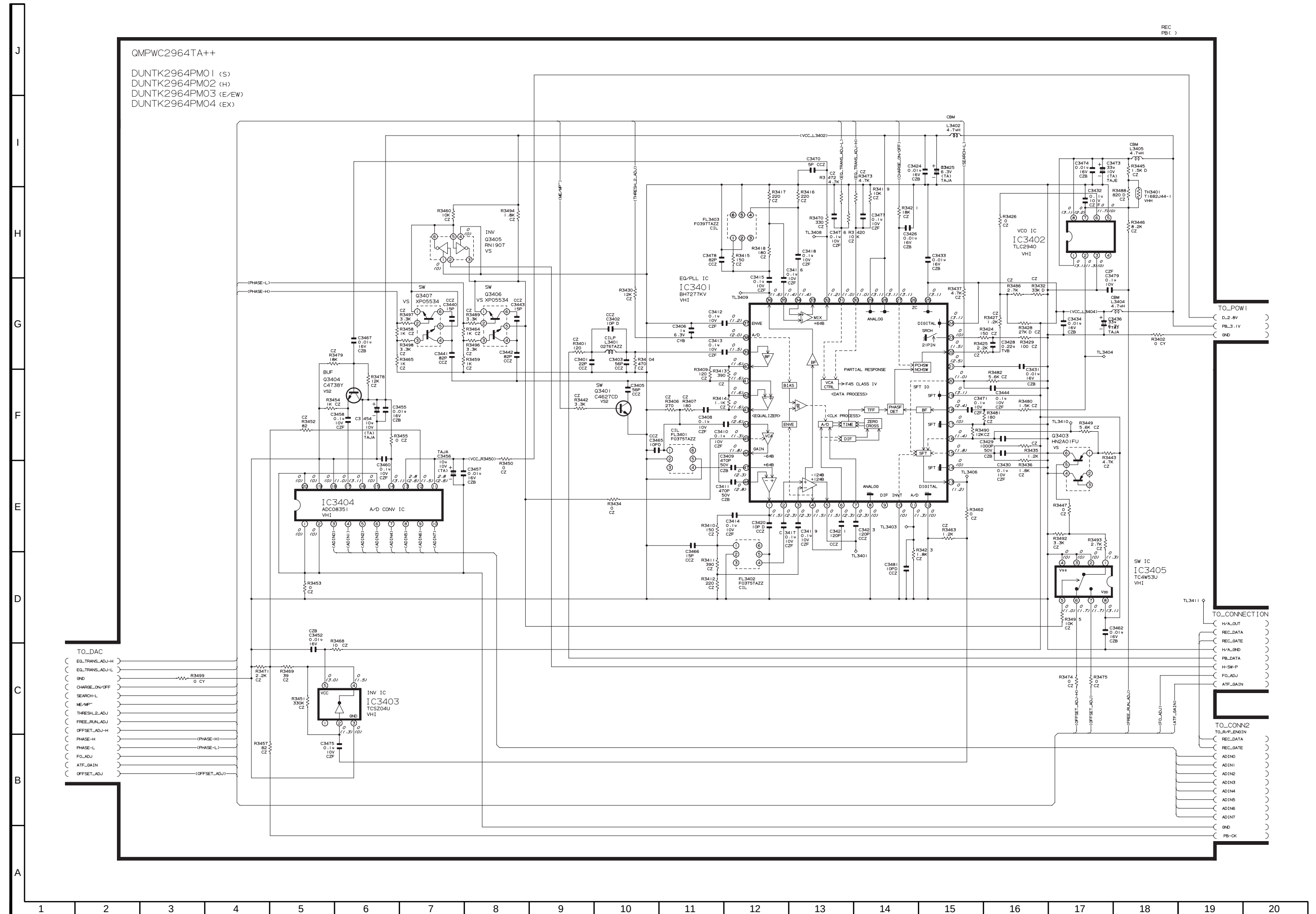




13-13. CONNECTION(B-B) SCHEMATIC DIAGRAM

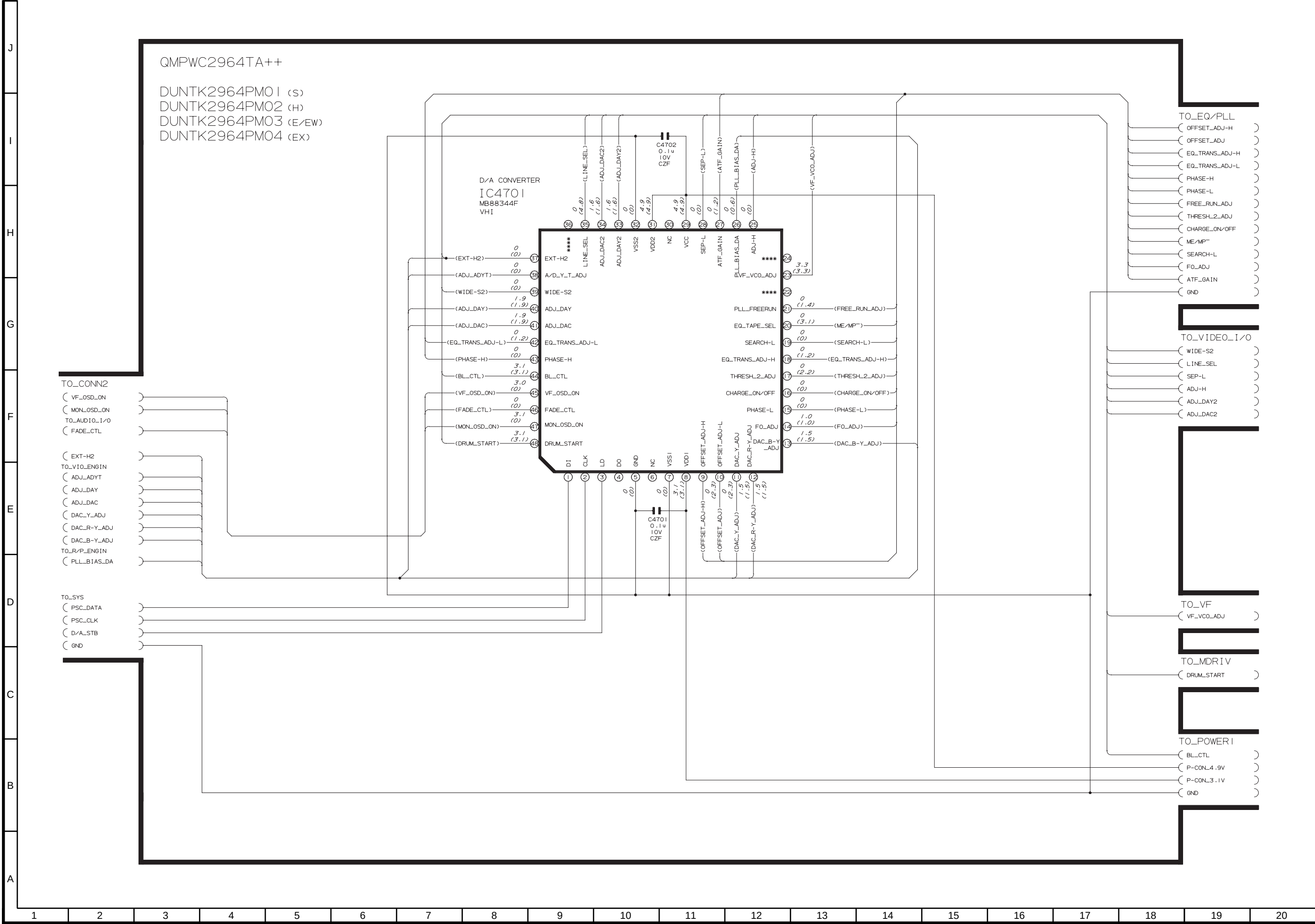


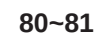
QMPWC2964TA++ DUNK2964PM01 (S)
DUNK2964PM02 (H)
DUNK2964PM03 (E/EW)
DUNK2964PM04 (AEX)



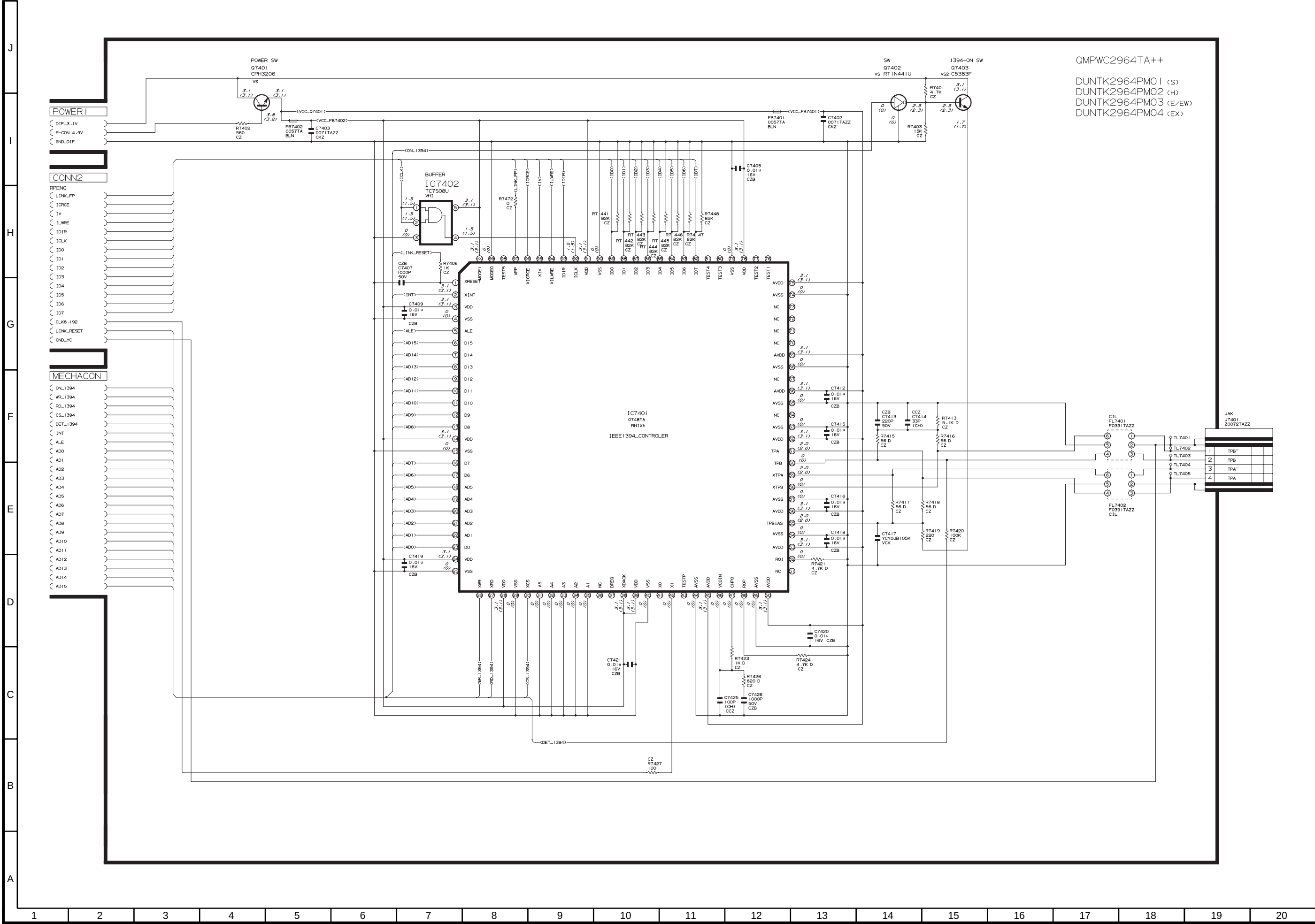
VL-PD3AS/AH/AE

13-15. DAC SCHEMATIC DIAGRAM

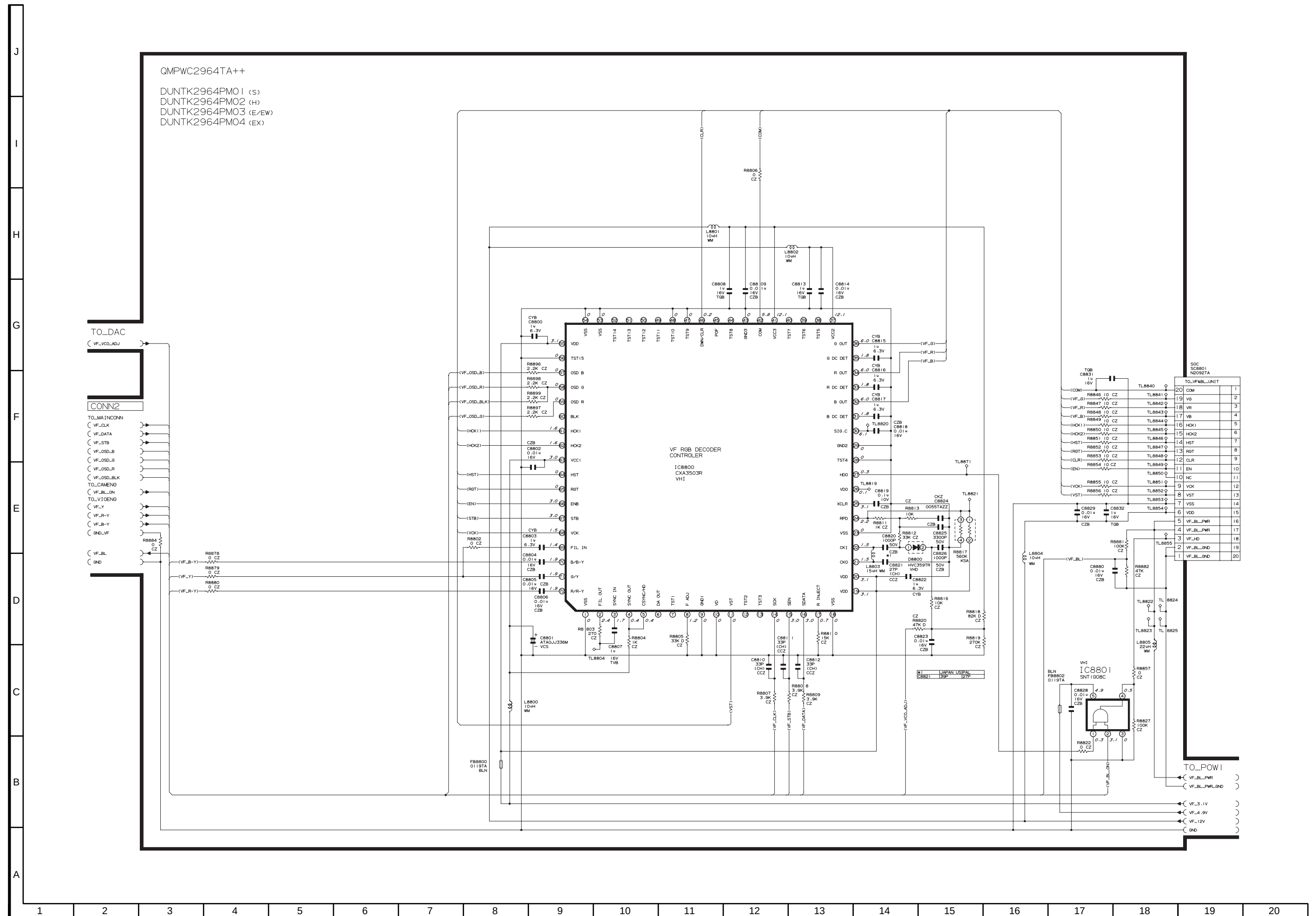


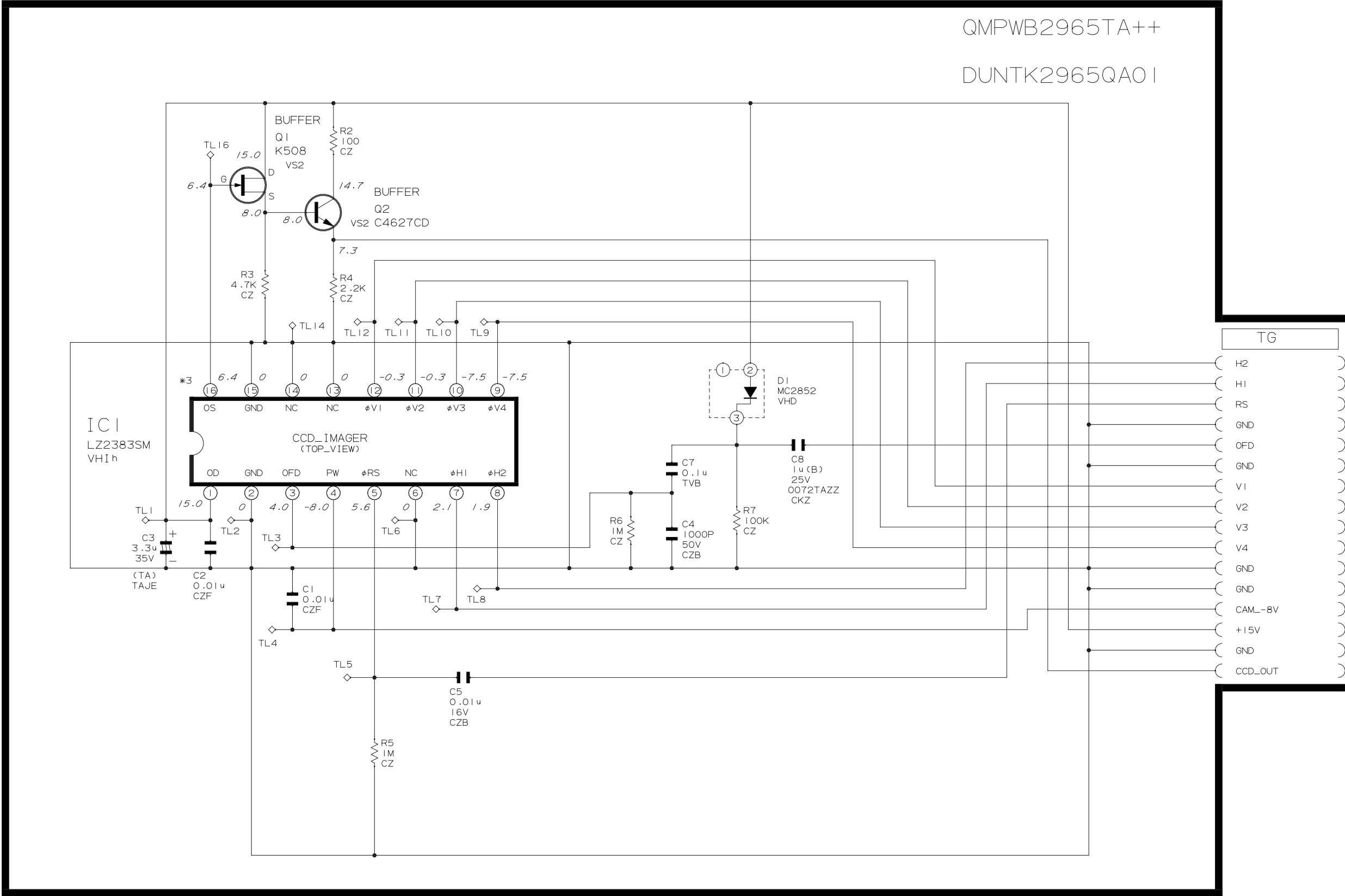


13-17. DIGITAL I/F SCHEMATIC DIAGRAM





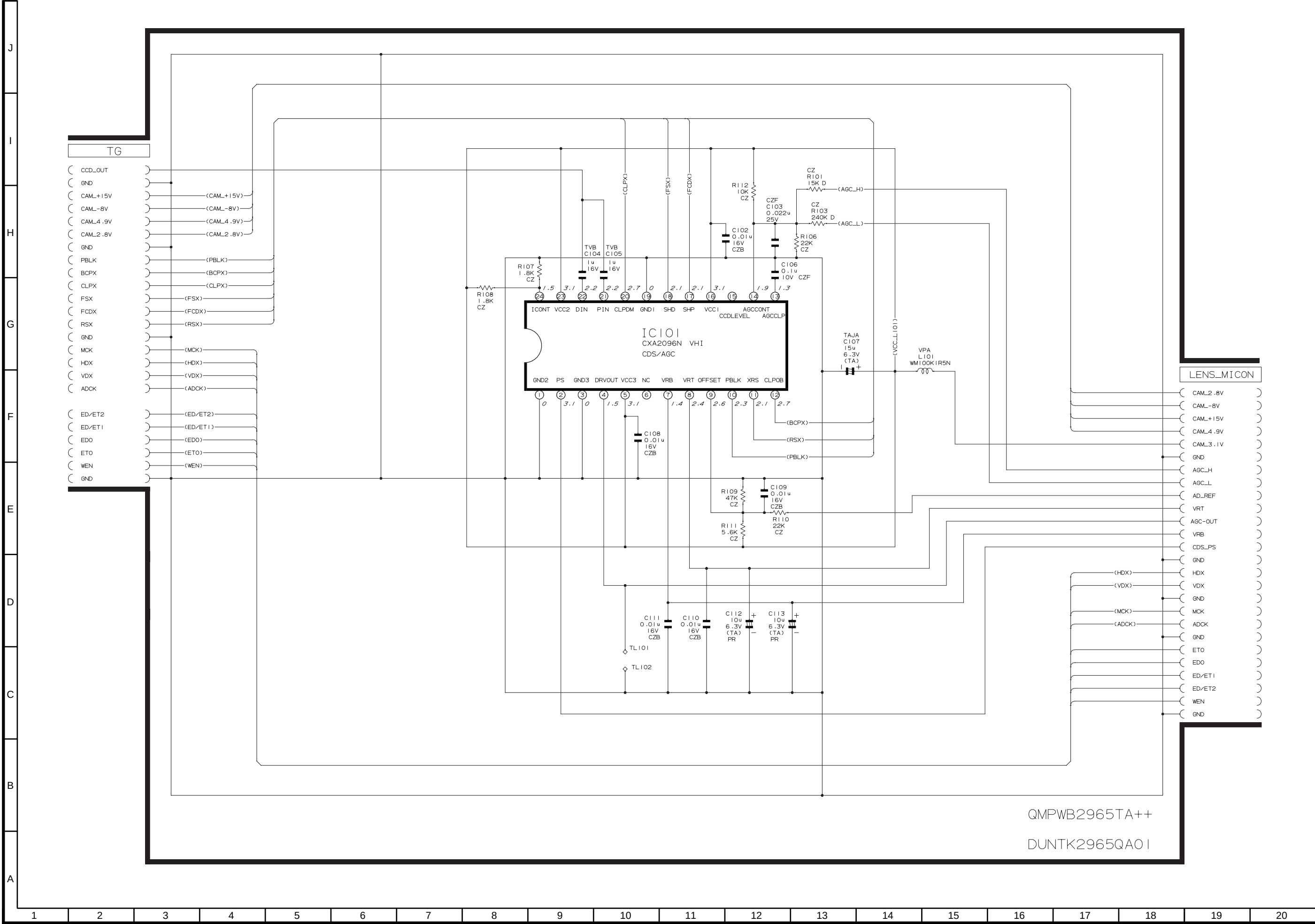






VL-PD3AS/AH/AE

13-22. CDS SCHEMATIC DIAGRAM

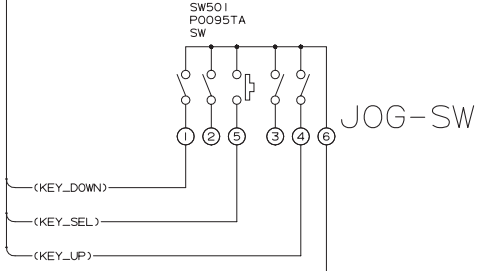
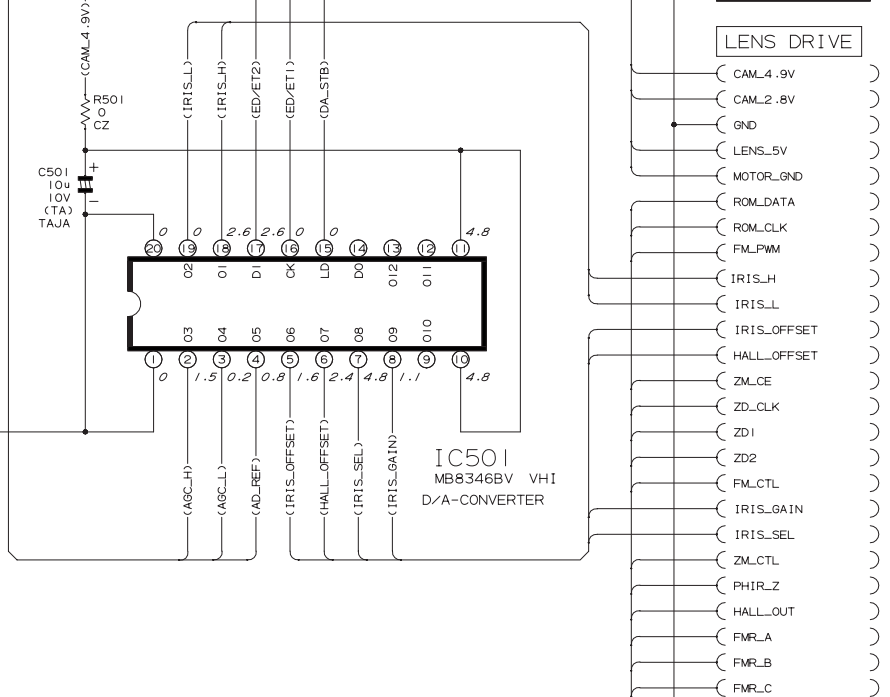
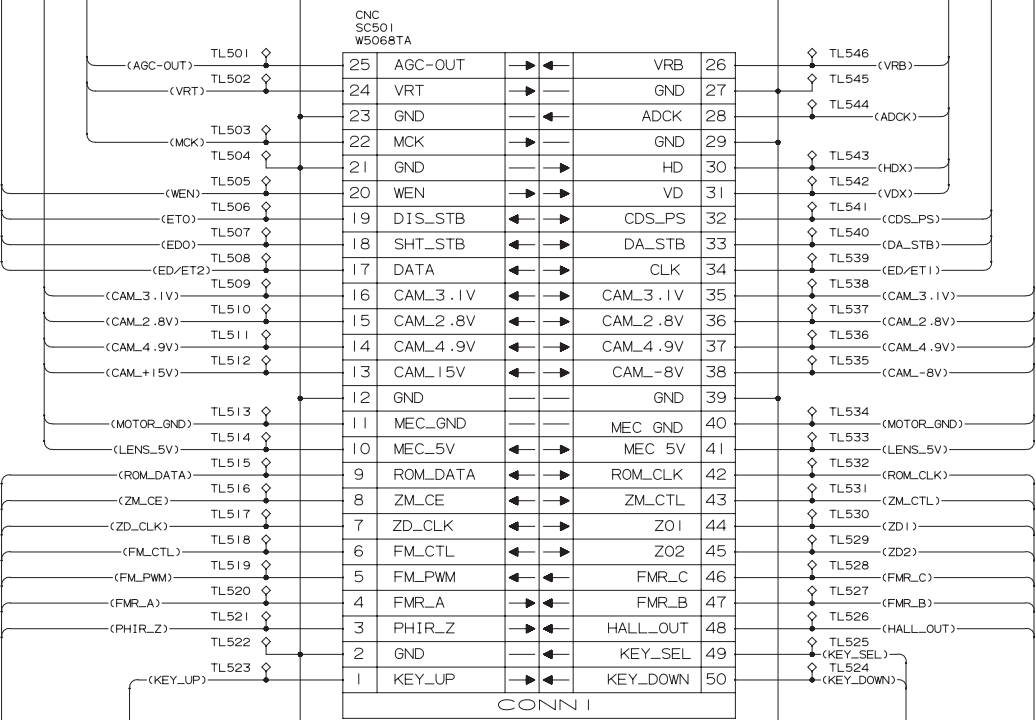


VL-PD3AS/AH/AE

13-23. LENS JOG SCHEMATIC DIAGRAM

TO CDS

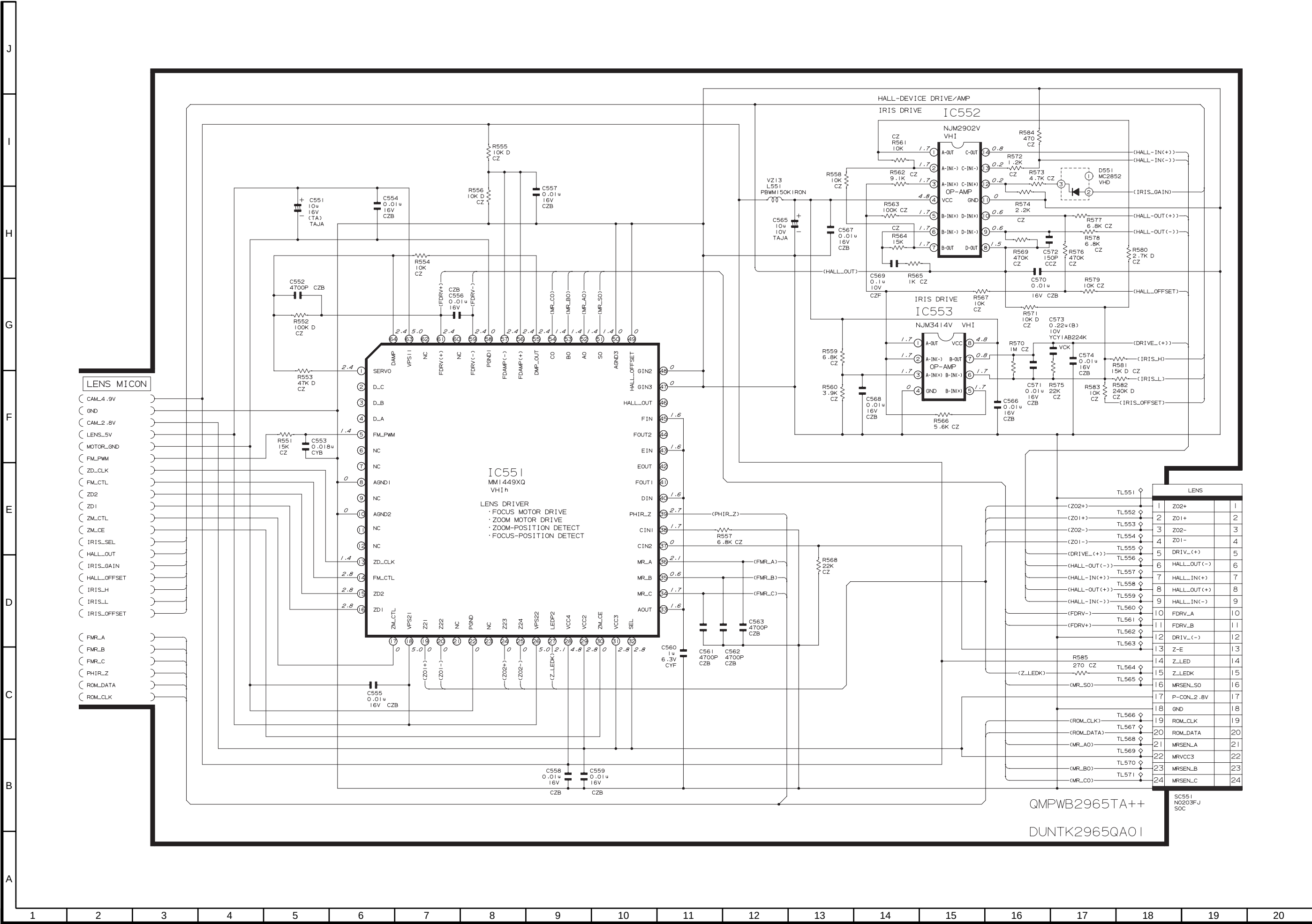
- (GND
- (ED/ET2
- (ED/ET1
- (EDO
- (ETO
- (GND
- (AD_REF
- (AGC_L
- (AGC_H
- (GND
- (VRT
- (AGC-OUT
- (VRB
- (HDX
- (VDX
- (MCK
- (ADCK
- (GND
- (CAM_3.1V
- (CAM_4.9V
- (CAM_+15V
- (CAM_-8V
- (CAM_2.8V
- (GND
- (WEN
- (CDS_PS



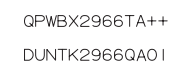
QMPWB2965TA++

DUNTk2965QA01

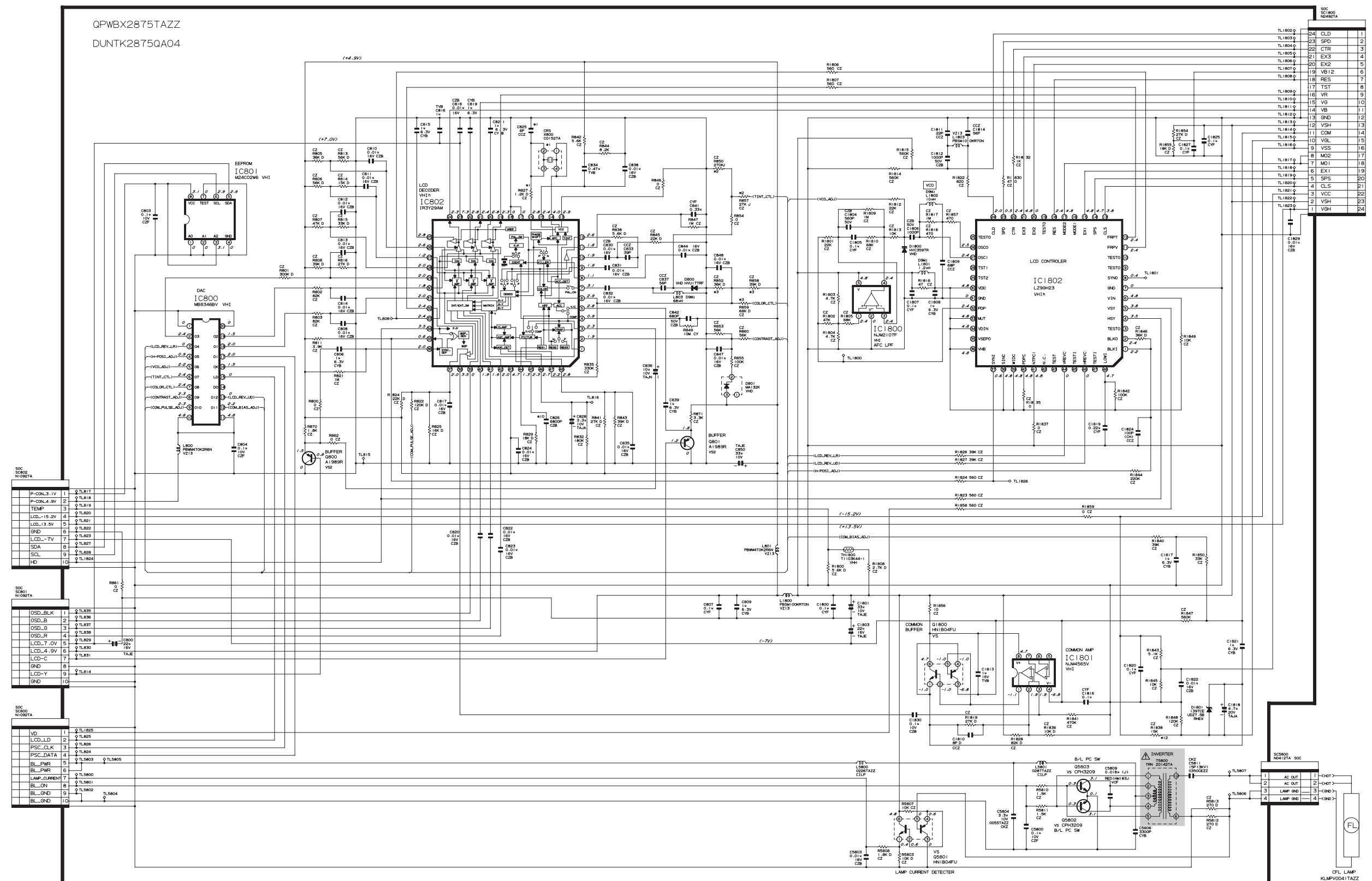
13-24. LENS DRIVE SCHEMATIC DIAGRAM



⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

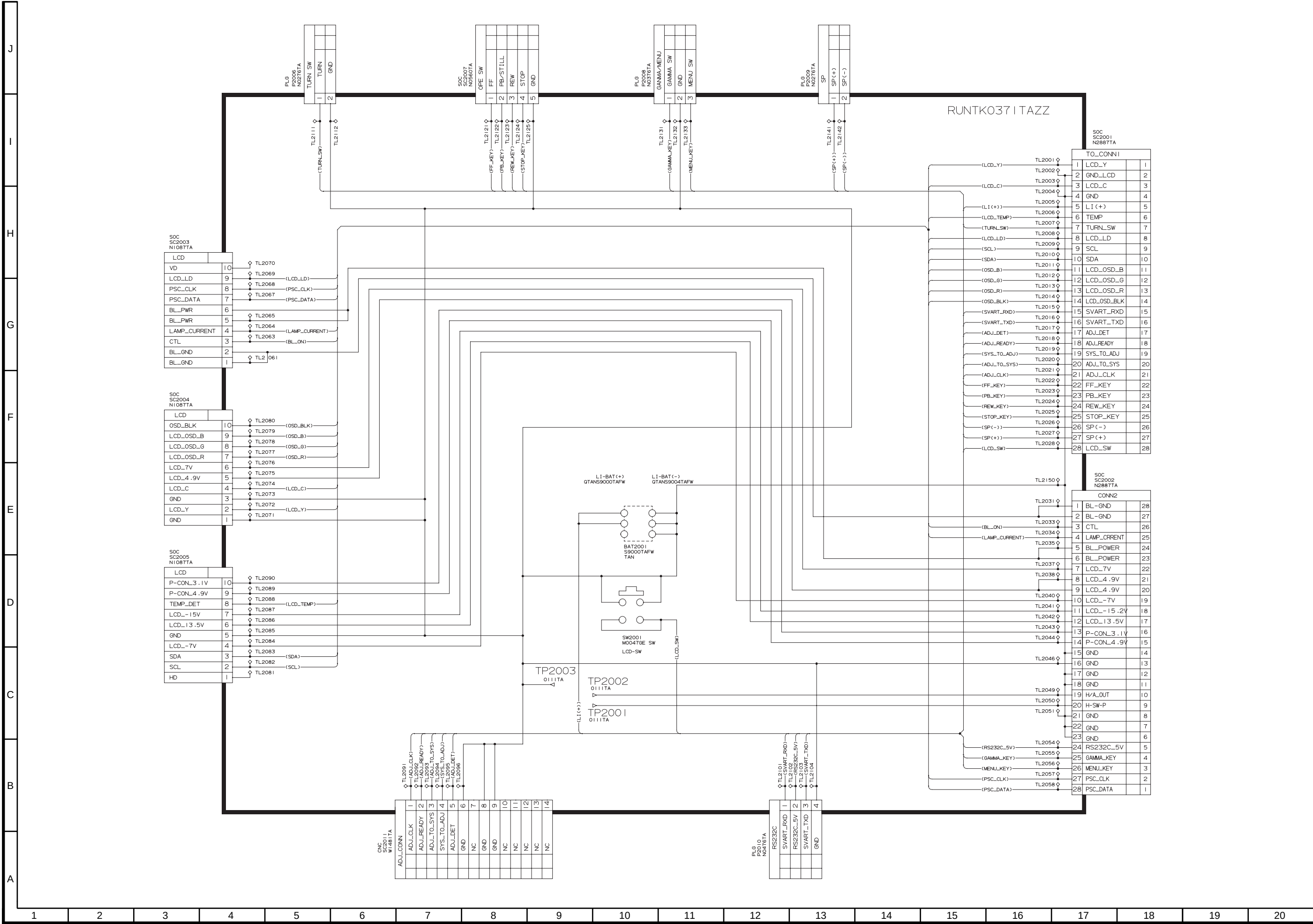


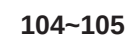
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



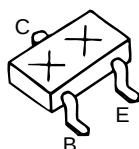
VL-PD3AS/AH/AE

13-28. JOINT SCHEMATIC DIAGRAM

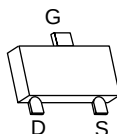




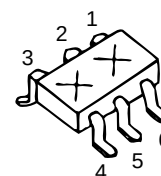
14. SEMICONDUCTOR LEAD IDENTIFICATION



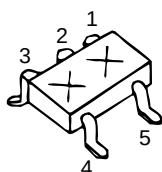
2SA1989R	RT1N441U
2SB12956	2SC4627CD
2SC4738Y	UN9214
FMMT717	CPH3209
2SC5383F	CPH3109
2SA1588Y	RT1P441U
	CPH3206



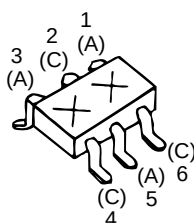
3LN01S



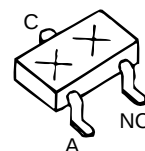
HN2A01FU	CPH6701
HN1B04FU	TK11813M
HN2C01FU	RN4984
RN4990	RN4982
XP05534	FC117
RN1907	



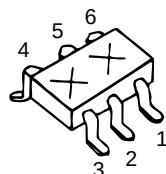
S81230SG	TA75S01F
RN1704	TC7S08U
580925AN	TA7SL02U
2SC4944Y	TC7S04U
NJU7012F	TCSZ04U
PST597KN	TC7S02U
TC7SL04U	NJU7012F
NJM2107F	



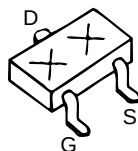
BAV756S



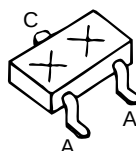
MC2852



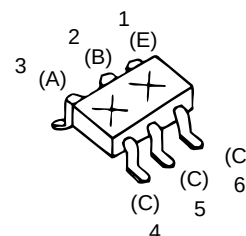
XN04391



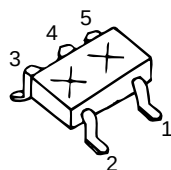
NDS332P



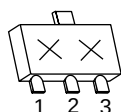
MA132WK



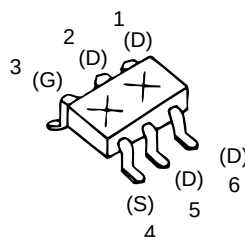
CPH6701



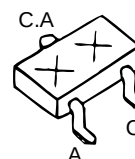
XN1213
FMG12
SNT1G08C



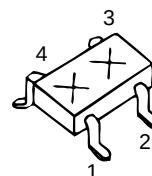
RH5RE58A



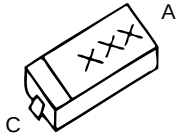
SI3443DV



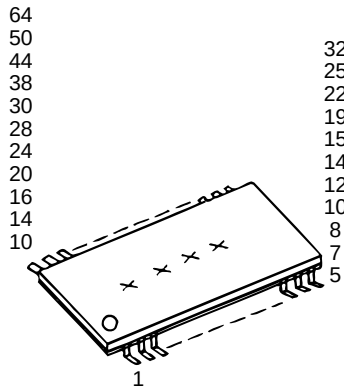
DA221



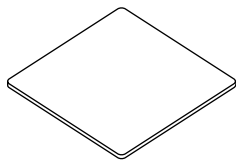
PST592KM



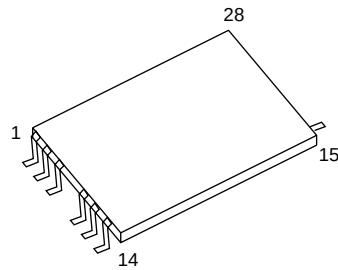
MA729	RD2R7UM0
MA2S111	HVU17TRF
HVU350B	EX1394CE
HVU359TR	HVC359TR
MI1A3	



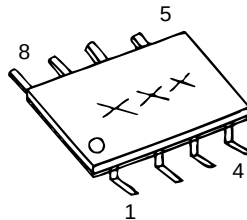
CXA2096N	NJM2538B	LV4051AT
MS548331	NJM2904V	LV04AT
LV4051AT	NJM2902V	TL1454PW
LA7473V	NJM3414V	ADC08351
M40C558V	MB8346BV	PCM3006T
T7A164S	IX0804	
UPD16510	IX0793TA	



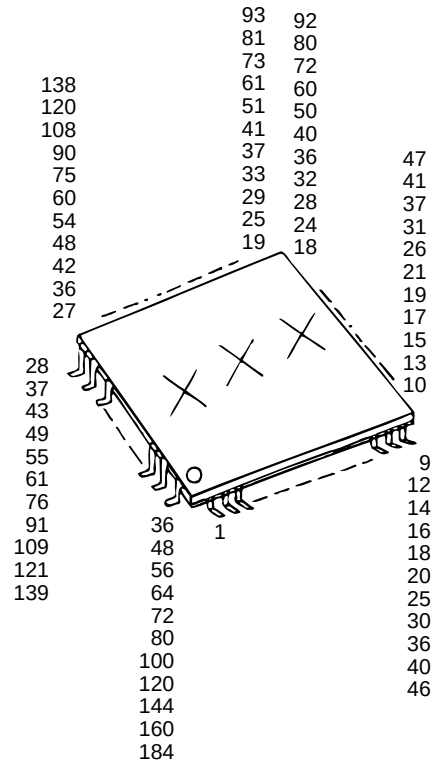
IX0706TA
IX0710TA
IX0707TA
IX0802TA



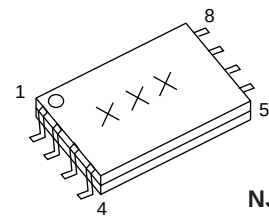
IX0560TA



S84235F	TC7W74U
TA75W558	TC7W08U
TC4W66U	TC7WH74U
TC7W14U	TC7W66U
TC7W74U	M24C16W6
TC7W04U	M24C04W6
NJM2143R	M24C02W6
TLC2940	NJM2143R



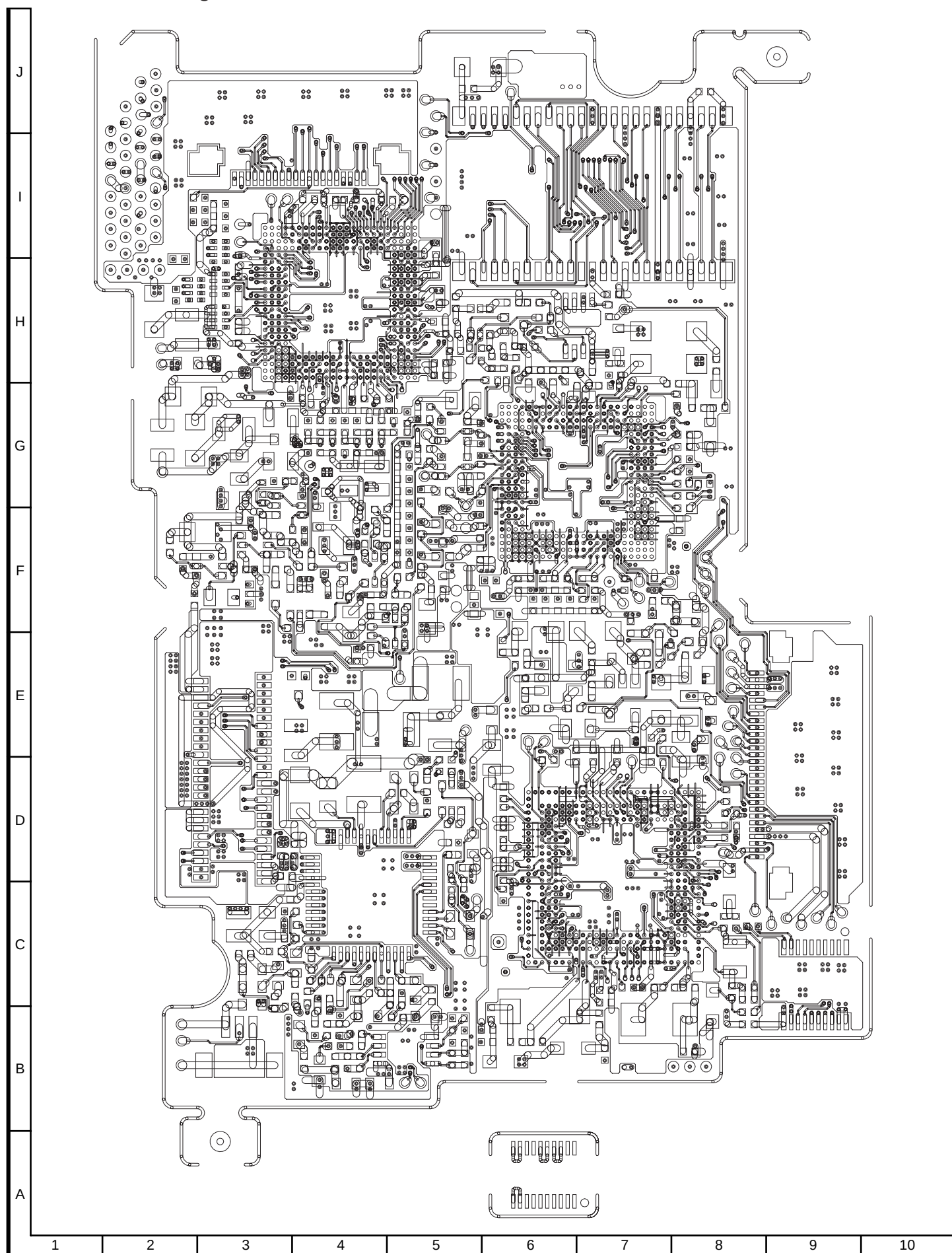
ADS933Y	LZ9GH23
IX0835TA	CXA3503R
IX0819TA	MB88344F
BH7277KV	UPC2391G
BH7275KV	LB11990W
MB3825A	MM1449XQ
BA7761KV	BBH7761KV
LR38610	IX0748TA
IR3Y29AM	



NJM2235V
S84235F
MM1116FS
TC4W53U
NJM4565V

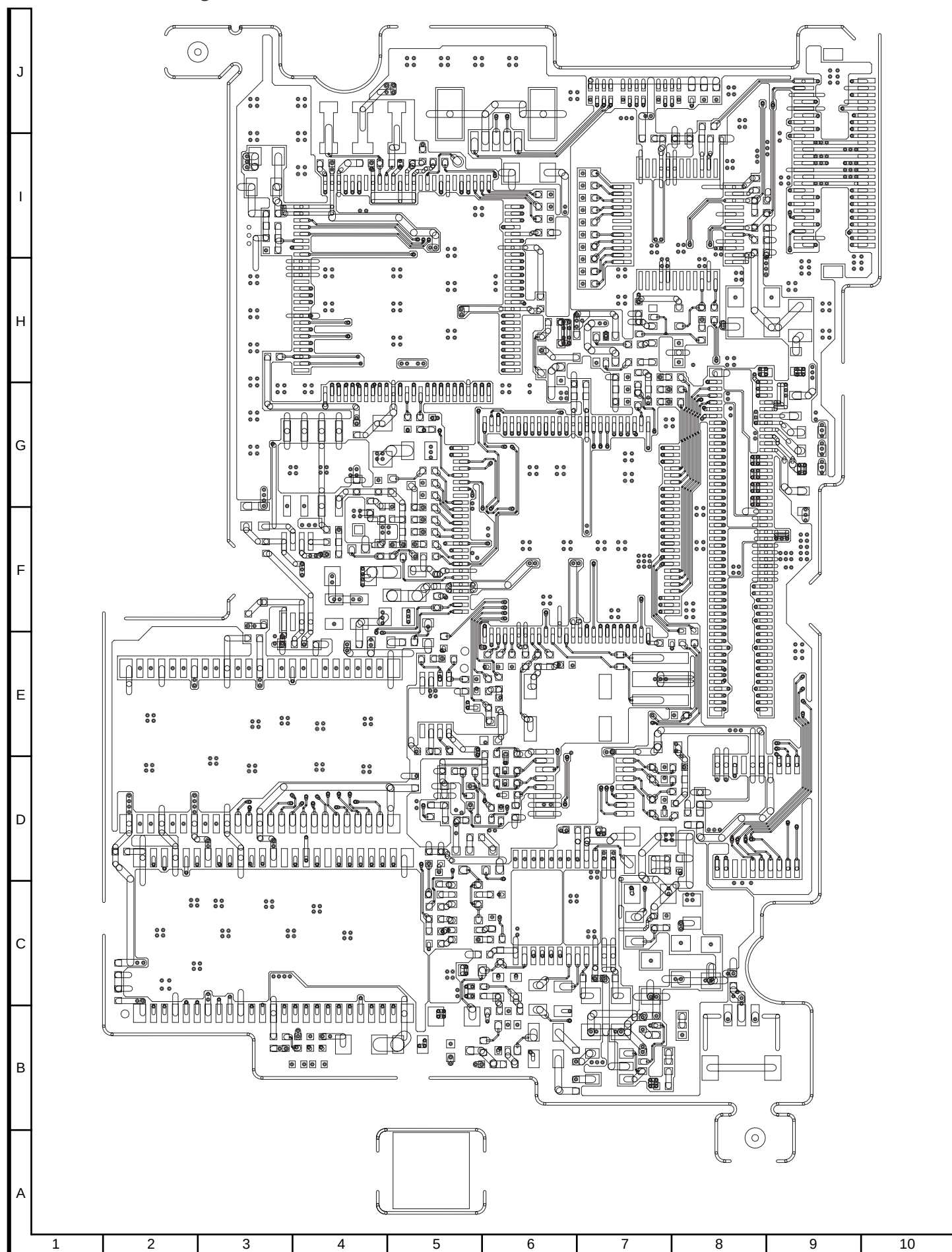


MAIN1 PWB Wiring Side SIDE A



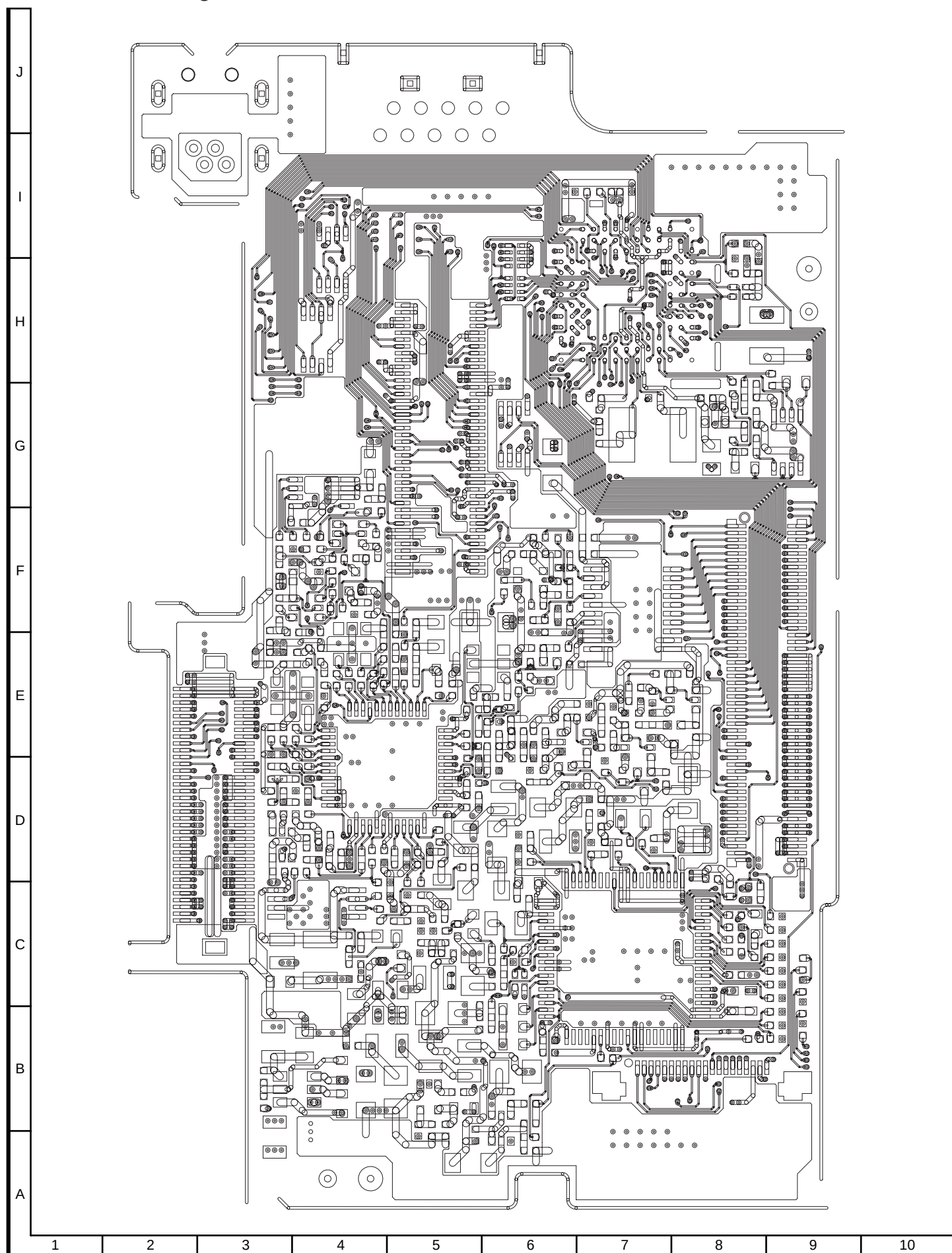


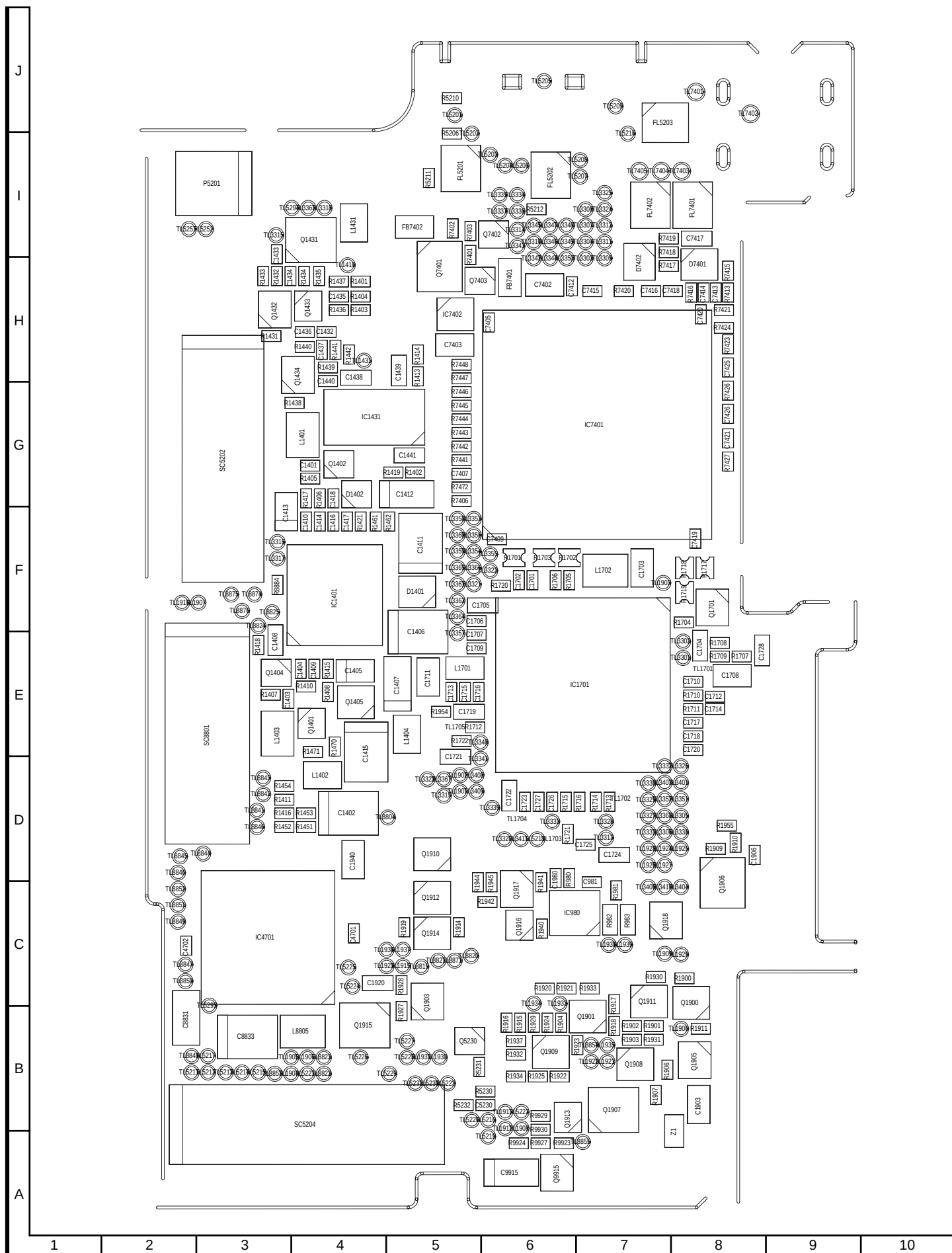
MAIN1 PWB Wiring Side SIDE B



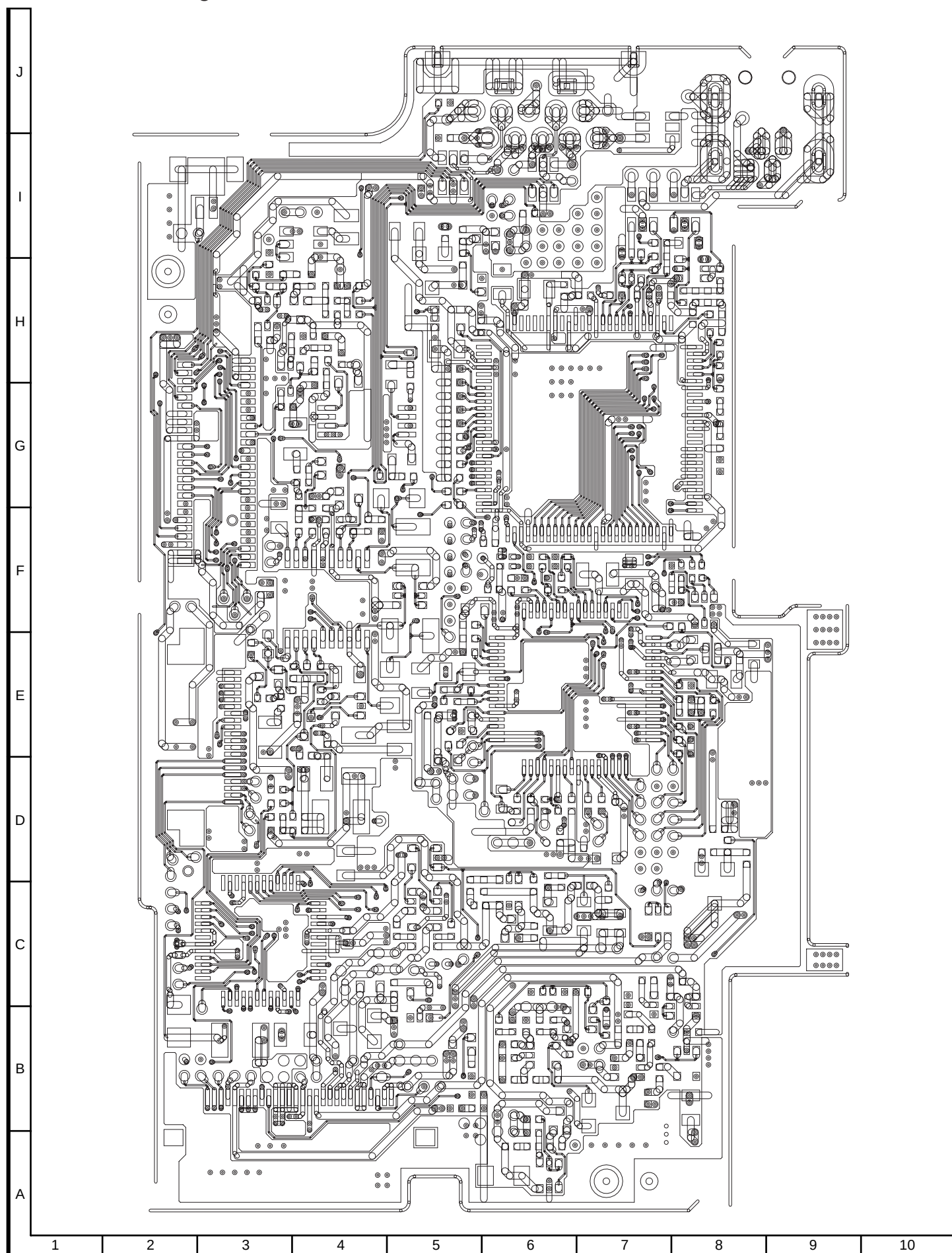


MAIN2 PWB Wiring Side SIDE A

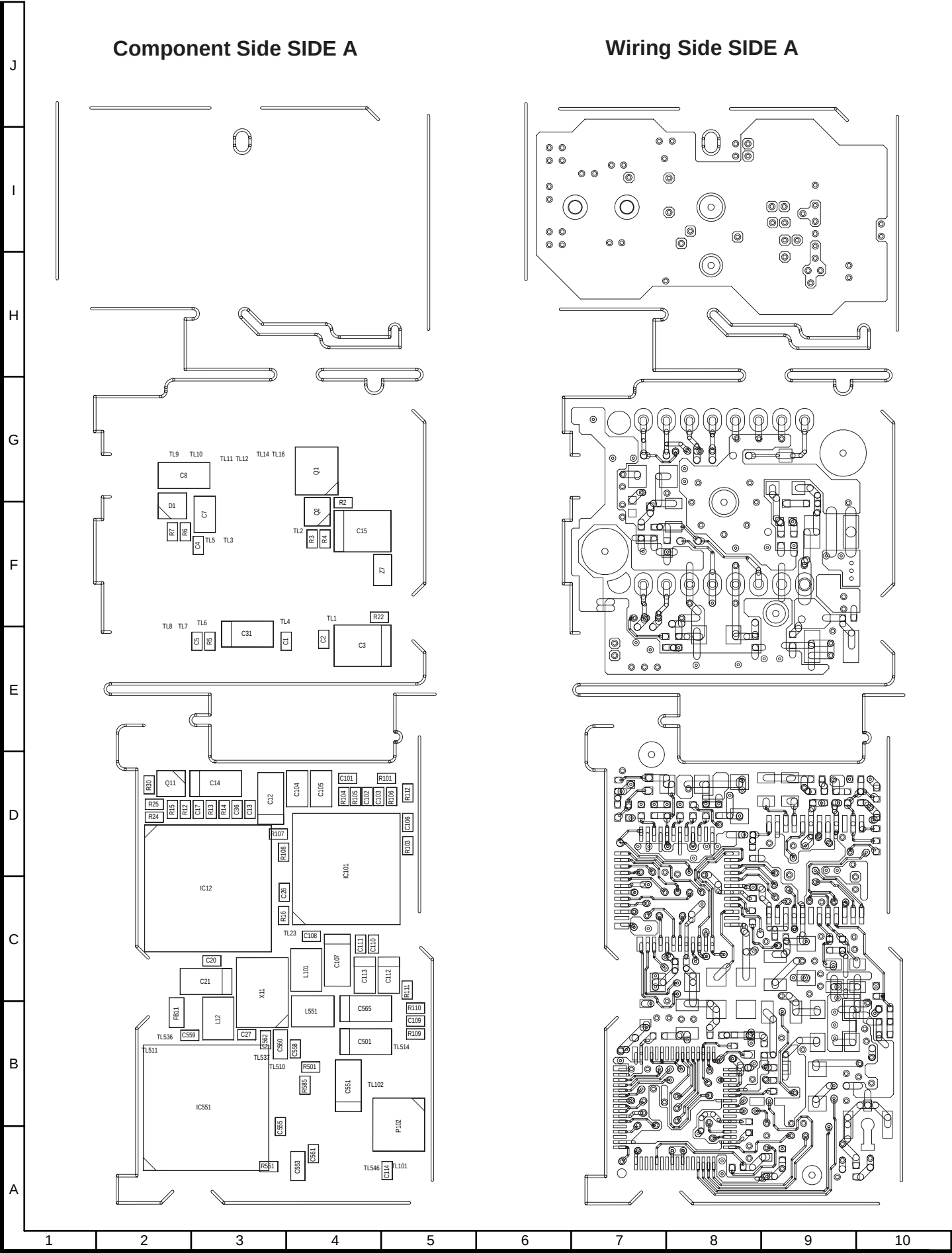




MAIN2 PWB Wiring Side SIDE B

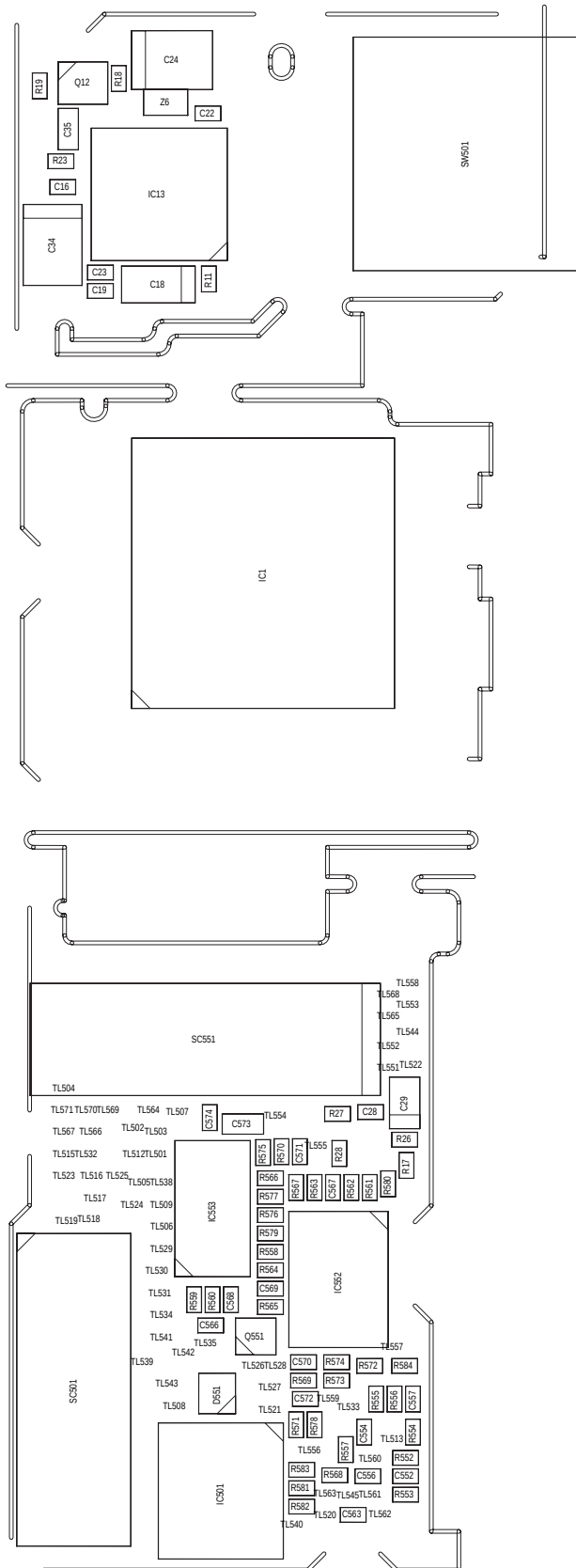


CAMERA HEAD PWB

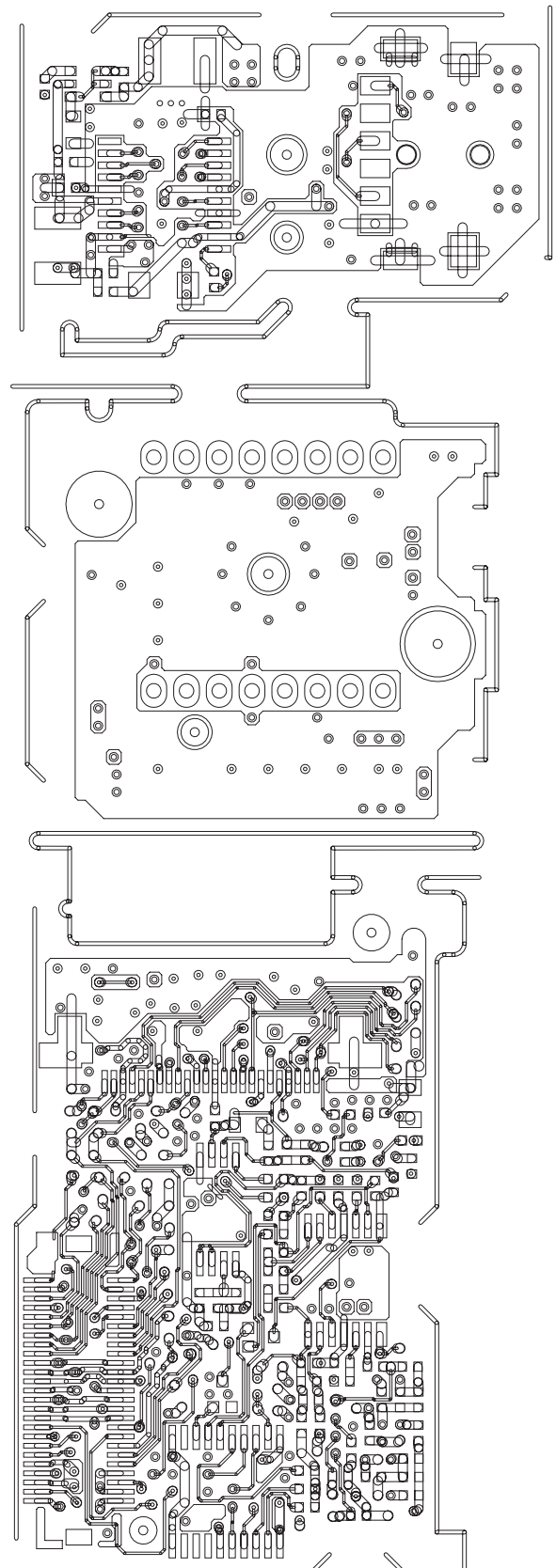


CAMERA HEAD PWB

Component Side SIDE B



Wiring Side SIDE B



J



H



F



D



D



The floor plan shows a large, rectangular building with a complex internal layout. The building is divided into many rooms, each labeled with a number or code. The layout is symmetrical and formal, typical of a government building. The plan includes a large central area, possibly a courtyard or a large hall, and several smaller rooms and corridors. The overall design is symmetrical and formal, typical of a government building. The plan is oriented with a north arrow pointing towards the top right.

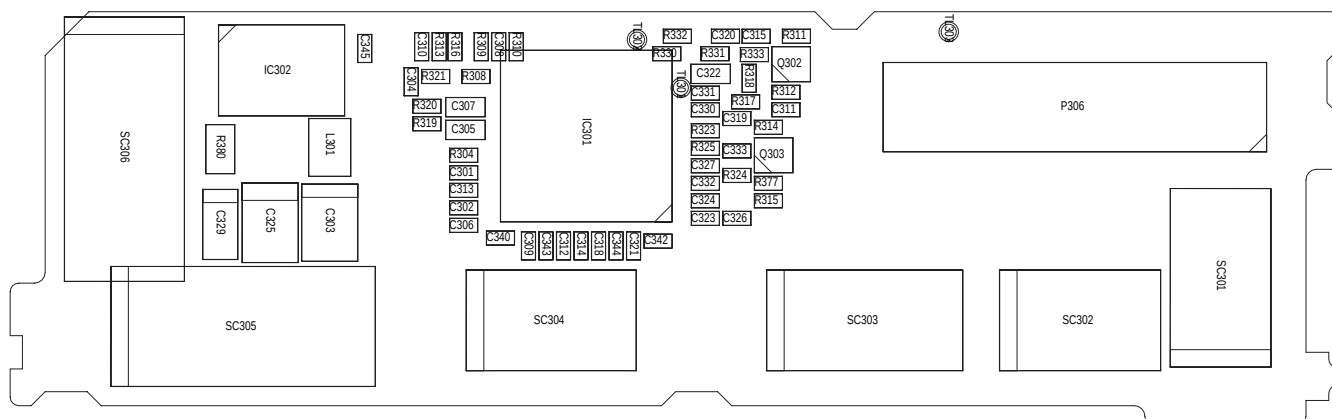
Key features of the plan include:

- A large central area, possibly a courtyard or a large hall, labeled with the number 1000.
- Several smaller rooms and corridors, each labeled with a number or code.
- A symmetrical layout, with rooms and corridors arranged in a balanced manner.
- A formal design, typical of a government building.
- A north arrow pointing towards the top right.

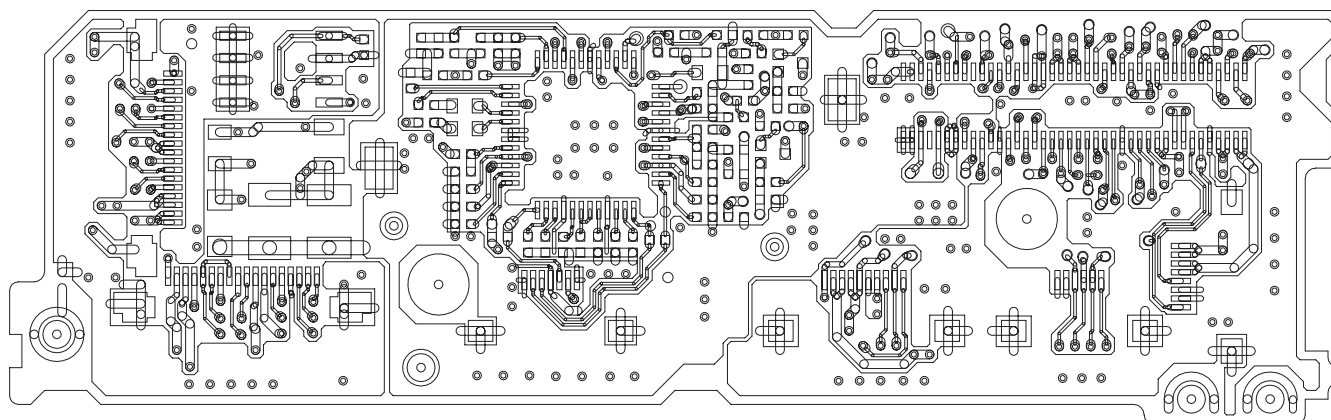
The plan is a detailed architectural drawing, showing the layout of the building and the location of each room. The rooms are labeled with numbers and codes, and the layout is symmetrical and formal. The plan is oriented with a north arrow pointing towards the top right.

HEAD AMP PWB

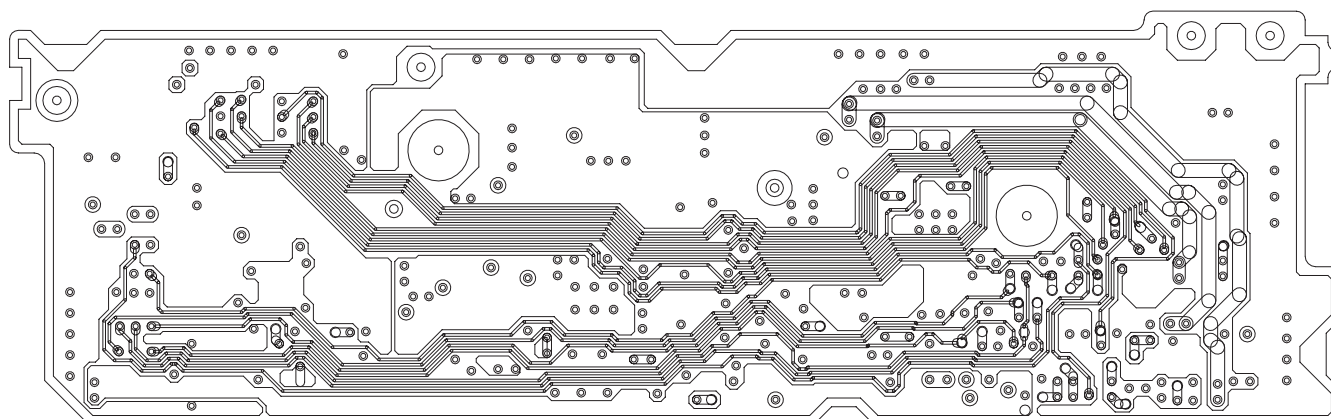
Component Side SIDE A



Wiring Side SIDE A



Wiring Side SIDE B



- M E M O -

This image shows a full page of white paper with horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the entire width of the page. There are no margins, text, or other markings present.

16. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER	2. REF. NO.
3. PART NO.	4. DESCRIPTION
5. PRICE CODE	

△ MARK: SAFETY RELATED PARTS

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

DUNTK2963PM01	MAIN1 PWB Unit (VL-PD3AS)	—
DUNTK2963PM02	MAIN1 PWB Unit (VL-PD3AH)	—
DUNTK2963PM03	MAIN1 PWB Unit (VL-PD3AE/AEW)	—
DUNTK2963PM04	MAIN1 PWB Unit (VL-PD3AEX)	—
DUNTK2964PM01	MAIN2 PWB Unit (VL-PD3AS)	—
DUNTK2964PM02	MAIN2 PWB Unit (VL-PD3AH)	—
DUNTK2964PM03	MAIN2 PWB Unit (VL-PD3AE/AEW)	—
DUNTK2964PM04	MAIN2 PWB Unit (VL-PD3AEX)	—
DUNTK2965QA01	CAMERA HEAD PWB Unit	—
DUNTK2966QA01	POWER2 PWB Unit	—
DUNTK2875QA04	LCD PWB Unit	—
RAMP-0033TAN1	Head Amp PWB Unit	—

TUNER AND ASSEMBLY UNITS

RUNTK0343TAZZ	Remote Control Receive Unit	AM
RUNTK0371TAZZ	JOINT PWB Unit	AS

**DUNTK2963PM01(VL-PD3AS)
DUNTK2963PM02(VL-PD3AH)
DUNTK2963PM03(VL-PD3AE/AEW)
DUNTK2963PM04(VL-PD3AEX)
MAIN1 PWB UNIT**

INTEGRATED CIRCUITS

IC151	VHiADS933Y/-1	ADS933Y, A/D Converter	AR
IC201	RH-iX0706TAZZ	IX0706TA, Digital Signal Process	BC
IC202	RH-iX0793TAZZ	IX0793TA, 16M-SDRAM	AX
IC401	VHiNJU7012F-1	NJU7012F, Amp	AE
IC405	VHiNJU7012F-1	NJU7012F, DC Amp	AE
IC407	RH-iX0793TAZZ	IX0793TA, Codec External Memory	AX

Ref. No.	Part No.	★	Description	Code
IC408	RH-iX0793TAZZ		IX0793TA, ECC External Memory	AX
IC452	RH-iX0710TAN1		IX0710TA, Codec/ECC/PCM/CLK.Gen	BE
IC601	VHiBH7761KV-1		BH7761KV, Audio I/O	AS
IC602	VHiNJM2143R-1		NJM2143R, Amp	AE
IC701	RH-iX0835TAZZ		IX0835TA	AY
IC702	VHiM24C16W6-1		M24C16W6, E ² PROM	AG
IC703	RH-iX0804TAZZ		IX0804TA	AM
IC704	VHiTC7W04U/-1		TC7W04U, Inverter	AD
IC751	VHiS84235F/-1		S84235F, Battery Backup/Sys 3V Regulator	AL
IC1602	VHiPCM3006T-1		PCM3006T, 16bit ADC/DAC	AS
IC3701	RH-iX0819TAZZ		IX0819TA, Svart/Lens Control Micon	AX
IC4401	RH-iX0707TAZZ		IX0707TA, Digital ADC/DACBC Decoder/Encoder	BC
IC4461	VHiTC4W53U/-1		TC4W53U, VCTL SW	AF
IC4471	VHiTC7S04U/-1		TC7S04U, Inverter	AE
IC5002	VHiLV4051AT-1		LV4051AT, Multi Plexer	AE

TRANSISTORS

Q601	VSFMG12///-1	FMG12	AD
Q602	VSARN4984///-1	RN4984	AC
Q603	VSHN1B04FU/-1	HN1B04FU	AC
Q604	VSHN2A01FU/-1	HN2A01FU	AC
Q605	VSRT1N441U/-1	RT1N441U	AB
Q606	VSARN4984///-1	RN4984	AC
Q701	VSUN9214///-1	UN9214	AB
Q702	VS2SA1989R/-1	2SA1989R	AB
Q4431	VSARN1704///-1	RN1704	AC
Q4432	VSHN2A01FU/-1	HN2A01FU	AC
Q4433	VSHN2A01FU/-1	HN2A01FU	AC
Q4434	VSHN2A01FU/-1	HN2A01FU	AC
Q4461	VSHN2A01FU/-1	HN2A01FU	AC
Q4462	VS2SC5383F/-1	2SC5383F	AB
Q4471	VSHN1B04FU/-1	HN1B04FU	AC
Q4472	VS2SA1989R/-1	2SA1989R	AB
Q4481	VSHN1B04FU/-1	HN1B04FU	AC
Q4482	VSHN1B04FU/-1	HN1B04FU	AC
Q5001	VSHN2C01FU/-1	HN2C01FU	AC
Q5002	VSHN2C01FU/-1	HN2C01FU	AC
Q5003	VSRT1N441U/-1	RT1N441U	AB
Q5004	VS3LN01S///-1	3LN01S	AC
Q5005	VSHN2C01FU/-1	HN2C01FU	AC
Q5006	VSRT1N441U/-1	RT1N441U	AB
Q5007	VS2SA1989R/-1	2SA1989R	AB
Q7800	VSHN2A01FU/-1	HN2A01FU	AC
Q7801	VSARN1704///-1	RN1704	AC
Q7820	VSHN1B04FU/-1	HN1B04FU	AC
Q7830	VSHN1B04FU/-1	HN1B04FU	AC
Q7860	VS2SA1989R/-1	2SA1989R	AB
Q7861	VS2SA1989R/-1	2SA1989R	AB
Q7862	VS2SA1989R/-1	2SA1989R	AB

DIODES

D403	VHDHVU362// -1	HVU362	AE
D404	VHDHVU362// -1	HVU362	AE
D471	VHDHVU362// -1	HVU362	AE
D472	VHDHVU359TR-1	HVU359TR	AE
D701	VHDDA221///-1	DA221	AB
D4451	VHDKV1812K/-1	KV1812K	AD
D4452	VHDKV1812K/-1	KV1812K	AD
D5001	VHDMA2S111/-1	MA2S111	AC
D5002	VHDMA132WK/-1	MA132WK	AA

PACKAGED CIRCUITS

X401	RCRSC0160TAZZ	Crystal, CRSC0160TA	AH
X701	RCRSC0032TAZZ	Crystal, CRSC0032TA	AG
X4451	RCRSC0167TAZZ	Crystal, CRSC0167TA	AM

COILS

FL403	RFiLC0164TAZZ	Filter, FiLC0164TA	AH
FL701	RFiLC0072TAZZ	Filter, FiLC0072TA	AE
FL3701	RFiLC0079TAZZ	Filter, FiLC0079TA	AE

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
L151	VPD9M100KR86N		Peaking, 10μH	AC	C449	RC-KZ0083TAZZ		Capacitor	AD
L201	VPBWM4R7MR30N		Peaking, 4.7μH	AC	C450	RC-KZ0100TAZZ		Capacitor	AD
L202	VPD9M100KR86N		Peaking, 10μH	AC	C451	VCKYCY0JB105K	1	6.3V Ceramic	AC
L203	VPBWM4R7MR30N		Peaking, 4.7μH	AC	C452	VCKYCY1CB104K	0.1	16V Ceramic	AB
L401	VPMAN100MR50N		Peaking, 10μH	AC	C456	VCSATA0JJ156M	15	6.3V Tantalum	AC
L402	VPMAN100MR50N		Peaking, 10μH	AC	C460	VCKYCY1CB103K	0.01	16V Ceramic	AB
L471	VPD9M8R2J2R0N		Peaking, 8.2μH	AC	C462	VCKYCY1CB103K	0.01	16V Ceramic	AB
L601	VPBWM330K2R1N		Peaking, 33μH	AC	C463	VCKYCY1CB103K	0.01	16V Ceramic	AB
L602	VPBWM330K2R1N		Peaking, 33μH	AC	C465	VCKYCY1CB103K	0.01	16V Ceramic	AB
L603	VPBWM330K2R1N		Peaking, 33μH	AC	C467	VCKYCY1CB103K	0.01	16V Ceramic	AB
L701	VPMAN100MR50N		Peaking, 10μH	AC	C468	VCKYCY1CB103K	0.01	16V Ceramic	AB
L1601	VPMAN100MR50N		Peaking, 10μH	AC	C470	VCKYCY1CB103K	0.01	16V Ceramic	AB
L3701	VPMAN100MR50N		Peaking, 10μH	AC	C473	VCKYCY1AB104K	0.1	10V Ceramic	AB
L4401	VPBWM330K2R1N		Peaking, 33μH	AC	C474	VCKYCY1AB104K	0.1	10V Ceramic	AB
L4402	VPMAN100MR50N		Peaking, 10μH	AC	C603	VCKYTV1CF225Z	2.2	16V Ceramic	AC
L4451	RCILP0275TAZZ		Coil, CILP0275TA	AD	C605	VCKYCY1AF104Z	0.1	10V Ceramic	AB
L4461	VPCEM470M3R7N		Peaking, 47μH	AC	C606	VCKYCY0JB105K	1	6.3V Ceramic	AC
L4481	VPCEM470M3R7N		Peaking, 47μH	AC	C607	VCKYCY1CB104K	0.1	16V Ceramic	AB
					C608	VCKYCY1CB104K	0.1	16V Ceramic	AB
					C609	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C610	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C611	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C616	VCKYTV1CF225Z	2.2	16V Ceramic	AC
					C617	VCKYCY0JB105K	1	6.3V Ceramic	AC
					C618	VCKYCY1CB473K	0.047	16V Ceramic	AA
					C619	VCKYCY1CB473K	0.047	16V Ceramic	AA
					C621	VCKYCY1HB681K	680p	50V Ceramic	AA
					C623	VCKYCY1AB104K	0.1	10V Ceramic	AB
					C624	VCKYCY1EB472K	4700p	25V Ceramic	AB
					C626	VCKYCY1HB681K	680p	50V Ceramic	AA
					C628	VCKYCY1AB104K	0.1	10V Ceramic	AB
					C629	VCKYCY1EB472K	4700p	25V Ceramic	AB
					C631	VCSATA1AJ475M	4.7	10V Tantalum	AC
					C632	VCSATA0JJ156M	15	6.3V Tantalum	AC
					C633	VCSATA0JJ156M	15	6.3V Tantalum	AC
					C634	VCSAPR0JJ106M	10	6.3V Tantalum	AD
					C635	VCSATE1AJ476M	47	10V Tantalum	AD
					C636	VCSATE1AJ476M	47	10V Tantalum	AD
					C637	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C638	VCSAPR1AJ475M	4.7	10V Tantalum	AD
					C639	VCSATA0JJ156M	15	6.3V Tantalum	AC
					C640	VCSATE1AJ476M	47	10V Tantalum	AD
					C641	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C642	VCSATE0JJ107M	100	6.3V Tantalum	AE
					C643	VCKYCY1CB104K	0.1	16V Ceramic	AB
					C644	VCKYCY1CB104K	0.1	16V Ceramic	AB
					C645	VCKYCY1AB104K	0.1	10V Ceramic	AB
					C646	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C647	VCKYCY1CB473K	0.047	16V Ceramic	AA
					C648	VCKYCY1CB473K	0.047	16V Ceramic	AA
					C649	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C651	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C701	VCKYCY1CB103K	0.01	16V Ceramic	AB
					C702	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C703	VCCCCZ1HH120J	12p	50V Ceramic	AB
					C704	VCCCCZ1HH150J	15p	50V Ceramic	AB
					C705	VCKYTV1AB105K	1	10V Ceramic	AD
					C706	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C707	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C708	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C709	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C710	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C711	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C712	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C713	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C714	VCKYCY1CB103K	0.01	16V Ceramic	AB
					C715	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C751	VCKYCY1AF105Z	1	10V Ceramic	AC
					C752	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C753	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C754	VCKYCY1HB102K	1000p	50V Ceramic	AB
					C755	VCSATA0JJ106M	10	6.3V Tantalum	AD
					C756	VCKYCY1AF104Z	0.1	10V Ceramic	AB
					C761	VCCCCZ1HH221J	220p	50V Ceramic	AB
					C762	VCCCCZ1HH221J	220p	50V Ceramic	AB

CAPACITORS

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C1601	VCSATA0JJ106M	10	6.3V Tantalum	AD	RESISTORS				
C1602	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R152	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C1603	VCKYTV1AB105K	1	10V Ceramic	AD	R153	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C1604	VCKYTV1AB105K	1	10V Ceramic	AD	R154	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C1605	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R155	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
C1607	VCSATA0JJ106M	10	6.3V Tantalum	AD	R156	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C1608	VCSATA0JJ106M	10	6.3V Tantalum	AD	R157	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1609	VCKYCZ1HB222K	2200p	50V Ceramic	AB	R158	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1610	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R159	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1611	VCKYTV1CB224K	0.22	16V Ceramic	AB	R160	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1612	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R161	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1613	VCSATA1AJ475M	4.7	10V Tantalum	AC	R162	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1614	VCKYCZ1HB222K	2200p	50V Ceramic	AB	R163	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1615	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R164	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1616	VCSATA1AJ475M	4.7	10V Tantalum	AC	R165	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C1617	VCKYTV1CB224K	0.22	16V Ceramic	AB	R166	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C3701	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R202	VRK-SB1FF473J	47k	0.0315W	AB
C3702	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R203	VRK-SB1FF473J	47k	0.0315W Metal Composition	AB
C3703	VCKYCZ1AF104Z	0.1	10V Ceramic	AB					
C3705	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R204	VRK-SB1FF473J	47k	0.0315W Metal Composition	AB
C3707	VCKYTV1AB105K	1	10V Ceramic	AD					
C3708	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R214	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C3709	VCKYCZ1HB102K	1000p	50V Ceramic	AB					
C4401	RC-KZ0083TAZZ	Capacitor		AD	R215	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C4402	RC-KZ0083TAZZ	Capacitor		AD	R226	VRK-SB1FF562J	5.6k	0.0315W	AC
C4403	RC-KZ0083TAZZ	Capacitor		AD	R227	VRK-SB1FF562J	5.6k	0.0315W Metal Composition	AC
C4404	RC-KZ0083TAZZ	Capacitor		AD					
C4405	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R240	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C4406	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R241	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C4410	RC-KZ0083TAZZ	Capacitor		AD	R242	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C4411	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R243	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C4412	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R244	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C4417	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R245	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C4419	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R246	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C4420	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R247	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C4421	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R401	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C4422	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R402	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4423	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R403	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C4424	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R404	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C4430	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R405	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C4433	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R406	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
C4437	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R407	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C4443	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R410	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4444	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R411	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
C4448	VCSAPROJJ106M	10	6.3V Tantalum	AD	R412	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
C4449	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R413	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4451	VCCCCZ1HH270J	27p	50V Ceramic	AB	R416	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C4454	VCCCCZ1HH270J	27p	50V Ceramic	AB	R417	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C4461	VCSATA1AJ106M	10	10V Tantalum	AC	R418	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
C4462	VCKYCZ1EB682K	6800p	25V Ceramic	AB	R428	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4463	VCKYCZ1EB682K	6800p	25V Ceramic	AB	R431	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4464	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R432	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C4465	VCKYCZ1AB104K	0.1	10V Ceramic	AB	R435	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C4466	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R436	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
C4481	VCSAPROJJ106M	10	6.3V Tantalum	AD	R437	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
C4482	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R438	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
C4485	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R440	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
C5020	VCKYCY1CF104Z	0.1	16V Ceramic	AA	R441	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA
C7820	VCCCCZ1HH150J	15p	50V Ceramic	AB	R442	VRS-CZ1JF114J	110k	1/16W Metal Oxide	AB
C7821	VCCCCZ1HH680J	68p	50V Ceramic	AB	R443	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C7830	VCCCCZ1HH150J	15p	50V Ceramic	AB	R446	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7831	VCCCCZ1HH680J	68p	50V Ceramic	AB	R453	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7832	VCSAPROJJ106M	10	6.3V Tantalum	AD	R454	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7833	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R462	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7840	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R467	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7841	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R468	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7842	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R469	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7843	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R470	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7854	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R471	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C7856	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R476	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C7858	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R477	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C7860	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R478	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C7861	VCSAPROJJ106M	10	6.3V Tantalum	AD	R603	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
					R609	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R610	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	R734	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R613	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R735	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R614	VRK-SA1JF222J	2.2k	1/16W Metal Composition	AB	R736	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R616	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R737	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R617	VRK-SA1JF222J	2.2k	1/16W Metal Composition	AB	R738	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R621	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R739	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R623	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R740	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R626	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R741	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R627	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R742	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R628	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R743	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R629	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R744	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R630	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R751	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R632	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R752	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
R634	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R753	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R635	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R754	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R636	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R761	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R638	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R763	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R639	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R1603	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R640	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1604	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R641	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	R1662	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R647	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3701	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R651	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3702	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R652	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA	R3703	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R653	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA	R3704	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R654	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R3705	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R655	VRK-SA1JF223J	22k	1/16W Metal Composition	AB	R3706	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R656	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R3707	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R660	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3709	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R661	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3710	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R662	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3711	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R663	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3712	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R664	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3713	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R666	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R3714	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R667	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3715	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R668	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R3716	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R669	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R4401	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R670	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R4402	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R671	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R4403	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R672	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R4404	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
R673	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	R4405	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R674	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R4406	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
R675	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R4407	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R676	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	R4408	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R701	VRK-SA1JF224J	220k	1/16W Metal Composition	AC	R4412	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R704	VRS-CZ1JF824J	820k	1/16W Metal Oxide	AA	R4413	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R706	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R4414	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R707	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R4420	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R708	VRS-CZ1JF106J	10M	1/16W Metal Oxide	AA	R4421	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R710	VRS-CZ1JF474D	470k	1/16W Metal Oxide	AA	R4422	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R711	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB	R4423	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R712	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4424	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R713	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4425	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R714	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4431	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R715	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R4432	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R716	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R4435	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA
R717	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4436	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R718	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4437	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R719	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R4438	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R721	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4439	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R722	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R4451	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R723	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R4452	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R724	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4453	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R725	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R4454	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R726	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R4455	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
R727	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4457	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R728	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R4460	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R729	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4461	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA
R730	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R4462	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA
R731	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4463	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R732	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4464	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R733	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R4465	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
					R4466	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
					R4467	VRS-CZ1JF302D	3k	1/16W Metal Oxide	AA
					R4468	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB
					R4469	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R4473	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R7862	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R4474	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7863	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R4475	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA	R7870	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R4476	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA	R7871	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R4477	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R7872	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R4478	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R7873	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R4479	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7874	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R4485	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA	R7875	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R4486	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	R7876	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R4487	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R7877	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R4488	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7878	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R4490	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7885	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R4491	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
R4492	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB201	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
R4493	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB456	RBLN-0057TAZZ		Balun, BLN-0057TA	AC
R4494	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB1001	RBLN-0028TAZZ		Balun, BLN-0028TA	AB
R4495	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB1002	RBLN-0028TAZZ		Balun, BLN-0028TA	AB
R4499	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB1003	RBLN-0028TAZZ		Balun, BLN-0028TA	AB
R5001	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA	FB1004	RBLN-0028TAZZ		Balun, BLN-0028TA	AB
R5002	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	FB1005	RBLN-0028TAZZ		Balun, BLN-0028TA	AB
R5003	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	P601	QPLGN0374TAZZ		Plug, 3Pin	AC
R5004	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	P3701	QPLGN0376TAZZ		Plug, 3Pin	AD
R5005	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	SC3702	QSOCN0560TAZZ		Socket, 5Pin	AC
R5006	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	SC5001	QSOCN2072TAZZ		Socket, 20Pin	AD
R5007	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	SC5002	QSOCN5111TAN1		Socket, 51Pin	AH
R5008	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	SC5003	QSOCN2886TAZZ		Socket, 28Pin	AE
R5009	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	P1001	QCNCM5069TAZZ		Connector, 50Pin	AG
R5010	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	P5001	QCNCM9167TAZZ		Connector, 100Pin	AK
R5011	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	DUNTK2964PM01(VL-PD3AS) DUNTK2964PM02(VL-PD3AH) DUNTK2964PM03(VL-PD3AE/AEW) DUNTK2964PM04(VL-PD3AEX) MAIN2 PWB UNIT				
R5012	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA					
R5013	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA					
R5014	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA					
R5015	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA					
R5016	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	INTEGRATED CIRCUITS				
R5017	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	IC980	VHiTA75S01F-1		TA75S01F, Amp	AD
R5018	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA	IC1401	VHiNJM2538B-1		NJM2538B, Video Out	AM
R5020	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	IC1431	VHiNJM2235V-1		NJM2235V, Video In SW	AE
R5021	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	IC1701	VHiLB11990W-1		LB11990W, Motor Driver	AR
R5022	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC3401	VHiBH7277KV-1		BH7277KV, EQ/PLL IC	AX
R5024	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC3402	VHiTLC2940/-1		TLC2940, VCO IC	AM
R5025	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC3403	VHiTCS2040U/-1		TCS2040, Inv IC	AE
R5026	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	IC3404	VHiADC08351-1		ADC08351, A/D Conv IC	AN
R5027	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC3405	VHiTC4W53U/-1		TC4W53U, SW IC	AF
R5028	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	IC4701	VHiMB88344F-1		MB88344F, D/A Converter	AV
R5032	VRS-CZ1JF184J	180k	1/16W Metal Oxide	AA	IC5201	VHiTC7W08U/-1		TC7W08U	AE
R5033	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC5202	VHiTC7W08U/-1		TC7W08U	AE
R5034	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC5203	VHiTC7W08U/-1		TC7W08U	AE
R5035	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC7401	RH-iX0748TAZZ		IX0748TA, IEEE 1394 Controler	BA
R5036	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA	IC7402	VHiTC7S08U/-1		TC7S08U, Buffer	AE
R5037	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC7701	RH-iX0802TAZZ		IX0802TA, Mecha Control Micon	AV
R5038	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	IC7702	VHiNJM2143R-1		NJM2143R, Servo Error Amp	AE
R5039	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	IC8800	VHiCXA3503R-1		CXA3503R, VF RGB Decoder Controler	AX
R5040	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC8801	VHiSNT1G08C-1		SNT1G08C	AD
R5041	VRK-SA1JF000J	0	1/16W Metal Composition	AB	TRANSISTORS				
R5042	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	Q1401	VSRT1N441U/-1		RT1N441U	AB
R7800	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	Q1405	VSRN1704///-1		RN1704	AC
R7801	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	Q1431	VSNXN04391/-1		XN04391	AC
R7803	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA	Q1434	VSHN1B04FU/-1		HN1B04FU	AC
R7820	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	Q1701	VSHN2C01FU/-1		HN2C01FU	AC
R7821	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	Q1900	VSRN4990///-1		RN4990	AC
R7822	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	Q1901	VS2SC4944Y/-1		2SC4944Y	AC
R7823	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	Q1902	VS2SA1989R/-1		2SA1989R	AB
R7830	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	Q1903	VSRN1704///-1		RN1704	AC
R7831	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	Q1904	VSFC117++++-1		FC117++++	AD
R7832	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	Q1905	VSRN1704///-1		RN1704	AC
R7833	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA					
R7840	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA					
R7841	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA					
R7842	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA					
R7843	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA					
R7844	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA					
R7845	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA					
R7860	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA					
R7861	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
Q1906	VSND5332P/-1		NDS332P	AD	C1415	VCSATE1AJ476M	47	10V Tantalum	AD
Q1907	VSCPH3109/-1		CPH3109	AD	C1416	VCKYCZ1CB103K	0.01	16V Ceramic	AB
Q1908	VSRN4984/-1		RN4984	AC	C1417	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q1909	VS2SC4944Y/-1		2SC4944Y	AC	C1418	VCKYCZ1CB103K	0.01	16V Ceramic	AB
Q1910	VSRN1704/-1		RN1704	AC	C1438	VCKYCY0JF105Z	1	6.3V Ceramic	AB
Q1911	VSRN4984/-1		RN4984	AC	C1439	VCKYCY0JF105Z	1	6.3V Ceramic	AB
Q1912	VSRN2904/-1		RN2904	AC	C1440	VCKYCZ1CB103K	0.01	16V Ceramic	AB
Q1913	VS2SC5383F/-1		2SC5383F	AB	C1701	VCKYCZ1CB223K	0.022	16V Ceramic	AC
Q1914	VSHN1C01FU/-1		HN1C01FU	AC	C1702	VCKYCZ1CB223K	0.022	16V Ceramic	AC
Q1915	VSFMMT717/-1		FMMT717	AE	C1703	VCKYTV1AB105K	1	10V Ceramic	AD
Q1916	VS2SC5383F/-1		2SC5383F	AB	C1704	VCKYCY1AF105Z	1	10V Ceramic	AC
Q1917	VSHN2A01FU/-1		HN2A01FU	AC	C1705	VCKYCY1CB104K	0.1	16V Ceramic	AB
Q1918	VSRN4984/-1		RN4984	AC	C1706	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q3401	VS2SC4627CD-1		2SC4627CD	AB	C1707	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q3403	VSHN2A01FU/-1		HN2A01FU	AC	C1708	RC-KZ0083TAZZ		Capacitor	AD
Q3404	VS2SC4738Y/-1		2SC4738Y	AA	C1709	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q3405	VSRN1907/-1		RN1907	AC	C1710	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q3406	VSXP05534/-1		XP05534	AD	C1711	VCKYTV1AB105K	1	10V Ceramic	AD
Q3407	VSXP05534/-1		XP05534	AD	C1712	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q5230	VS2SC5383F/-1		2SC5383F	AB	C1713	VCKYCZ1HB102K	1000p	50V Ceramic	AB
Q7401	VSCPH3206/-1		CPH3206	AD	C1714	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
Q7402	VSTR1N441U/-1		RT1N441U	AB	C1715	VCKYCZ1HB102K	1000p	50V Ceramic	AB
Q7403	VS2SC5383F/-1		2SC5383F	AB	C1716	VCKYCZ1HB102K	1000p	50V Ceramic	AB
Q9915	VSHN2A01FU/-1		HN2A01FU	AC	C1717	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C1718	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C1719	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C1720	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C1721	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C1722	VCKYCY1CB473K	0.047	16V Ceramic	AA
					C1723	VCKYCZ1EB472K	4700p	25V Ceramic	AB
					C1724	VCKYCY1AF105Z	1	10V Ceramic	AC
					C1725	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C1726	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C1727	VCCCCZ1HH101J	100p	50V Ceramic	AB
					C1728	VCKYCY0JF105Z	1	6.3V Ceramic	AB
					C1901	VCKYTV1EB104K	0.1	25V Ceramic	AB
					C1903	RC-KZ0083TAZZ		Capacitor	AD
					C1904	VCKYTV1AB105K	1	10V Ceramic	AD
					C1905	RC-KZ0083TAZZ		Capacitor	AD
					C1906	VCKYCZ1AB104K	0.1	10V Ceramic	AB
					C1908	VCSATA1EJ105M	1	25V Tantalum	AC
					C1913	VCKYTV1EB104K	0.1	25V Ceramic	AB
					C1940	VCKYTV1AB105K	1	10V Ceramic	AD
					C1980	VCKYCZ1AB104K	0.1	10V Ceramic	AB
					C3401	VCCCCZ1HH220J	22p	50V Ceramic	AB
					C3402	VCCCCZ1HH100D	10p	50V Ceramic	AB
					C3403	VCCCCZ1HH560J	56p	50V Ceramic	AB
					C3405	VCCCCZ1HH560J	56p	50V Ceramic	AB
					C3406	VCKYCY0JB105K	1	6.3V Ceramic	AC
					C3408	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3409	VCKYCZ1HB471K	470p	50V Ceramic	AB
					C3410	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3411	VCKYCZ1HB471K	470p	50V Ceramic	AB
					C3412	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3413	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3414	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3415	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3416	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3417	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3418	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3419	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3420	VCCCCZ1HH100D	10p	50V Ceramic	AB
					C3421	VCCCCZ1HH121J	120p	50V Ceramic	AB
					C3423	VCCCCZ1HH121J	120p	50V Ceramic	AB
					C3424	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C3425	VCSATA0JJ336M	33	6.3V Tantalum	AD
					C3426	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C3428	VCKYTV1CB224K	0.22	16V Ceramic	AB
					C3429	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C3430	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3431	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C3432	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C3433	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C3434	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C3436	VCSATA0JJ336M	33	6.3V Tantalum	AD
DIODE									
D8800	VHDHVC359TR-1		HVC359TR	AD					
PACKAGED CIRCUITS									
TH3401	VHHT1682J44-1		Thermistor	AC					
X7701	RCRSC0132TAZZ		Crystal, CRSC0132TA	AK					
COILS									
FL3401	RCiLF0375TAZZ		Coil, CiLF0375TA	AG					
FL3402	RCiLF0375TAZZ		Coil, CiLF0375TA	AG					
FL3403	RCiLF0397TAZZ		Coil, CiLF0397TA	AG					
FL5201	RCiLF0391TAZZ		Coil, CiLF0391TA	AG					
FL5202	RCiLF0391TAZZ		Coil, CiLF0391TA	AG					
FL5203	RCiLF0399TAZZ		Coil, CiLF0399TA	AG					
FL7401	RCiLF0391TAZZ		Coil, CiLF0391TA	AG					
FL7402	RCiLF0391TAZZ		Coil, CiLF0391TA	AG					
L1402	VPCBM470K2R4N		Peaking, 47μH	AC					
L1404	VPCBM470K2R4N		Peaking, 47μH	AC					
L1431	VPCBM470K2R4N		Peaking, 47μH	AC					
L1701	VPMAN100MR50N		Peaking, 10μH	AC					
L1702	VPBWM4R7MR30N		Peaking, 4.7μH	AC					
L1903	VPBWM2R2MR20N		Peaking, 2.2μH	AC					
L1904	VPBWM2R2MR20N		Peaking, 2.2μH	AC					
L1905	VPBWM2R2MR20N		Peaking, 2.2μH	AC					
L3401	RCiLP0276TAZZ		Coil, CiLP0276TA	AC					
L3402	VPCBM4R7MR25N		Peaking, 4.7μH	AC					
L3404	VPCBM4R7MR25N		Peaking, 4.7μH	AC					
L3405	VPCBM4R7MR25N		Peaking, 4.7μH	AC					
L7701	VPMAN100MR50N		Peaking, 10μH	AC					
L8800	VPAWM100J2R6N		Peaking, 10μH	AC					
L8801	VPAWM100J2R6N		Peaking, 10μH	AC					
L8802	VPAWM100J2R6N		Peaking, 10μH	AC					
L8803	VPAWM150J3R2N		Peaking, 15μH	AC					
L8804	VPAWM100J2R6N		Peaking, 10μH	AC					
L8805	VPAWM220J4R0N		Peaking, 22μH	AC					
CAPACITORS									
C981	VCKYCZ1AF104Z	0.1	10V Ceramic	AB					
C1402	VCSATE1AJ476M	47	10V Tantalum	AD					
C1404	VCKYCZ1CB103K	0.01	16V Ceramic	AB					
C1405	VCSAPR0JJ106M	10	6.3V Tantalum	AD					
C1406	VCSATE0JJ107M	100	6.3V Tantalum	AE					
C1407	VCSATA0JJ156M	15	6.3V Tantalum	AC					
C1408	VCKYCY0JF105Z	1	6.3V Ceramic	AB					
C1409	VCKYCZ1CB103K	0.01	16V Ceramic	AB					
C1410	VCKYCZ1CB103K	0.01	16V Ceramic	AB					
C1411	VCSATE0JJ107M	100	6.3V Tantalum	AE					
C1412	VCSATA0JJ156M	15	6.3V Tantalum	AC					
C1413	VCSAPR0JJ106M	10	6.3V Tantalum	AD					
C1414	VCKYCZ1CB103K	0.01	16V Ceramic	AB					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C3440	VCCCCZ1HH150J	15p	50V Ceramic	AB	C8815	VCKYCY0JB105K	1	6.3V Ceramic	AC
C3441	VCCCCZ1HH820J	82p	50V Ceramic	AB	C8816	VCKYCY0JB105K	1	6.3V Ceramic	AC
C3442	VCCCCZ1HH820J	82p	50V Ceramic	AB	C8817	VCKYCY0JB105K	1	6.3V Ceramic	AC
C3443	VCCCCZ1HH150J	15p	50V Ceramic	AB	C8818	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C3444	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	C8819	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3452	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C8820	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C3454	VCSATA1AJ106M	10	10V Tantalum	AC	C8821	VCCCCZ1HH270J	27p	50V Ceramic	AB
C3455	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C8822	VCKYCY0JB105K	1	6.3V Ceramic	AC
C3456	VCSATA1AJ106M	10	10V Tantalum	AC	C8823	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C3457	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C8824	RC-KZ0055TAZZ		Capacitor	AD
C3458	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	C8825	VCKYCZ1HB332K	3300p	50V Ceramic	AA
C3460	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	C8826	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C3462	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C8828	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C3465	VCCCCZ1HH100D	10p	50V Ceramic	AB	C8829	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C3466	VCCCCZ1HH150J	15p	50V Ceramic	AB	C8831	VCKYTQ1CB105K	1	16V Ceramic	AC
C3467	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C8832	VCKYTQ1CB105K	1	16V Ceramic	AC
C3470	VCCCCZ1HH5R0C	5p	50V Ceramic	AC	C8880	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C3471	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	C9915	VCSATA1CJ106M	10	16V Tantalum	AD
C3473	VCSATE1AJ336M	33	10V Tantalum	AG					
C3474	VCKYCZ1CB103K	0.01	16V Ceramic	AB					
C3475	VCKYCZ1AF104Z	0.1	10V Ceramic	AB					
C3476	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R980	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
C3477	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R982	VRS-CY1JFR22J	0.22	1/16W Metal Oxide	AA
C3478	VCCCCZ1HH820J	82p	50V Ceramic	AB	R983	VRS-CY1JFR22J	0.22	1/16W Metal Oxide	AA
C3479	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1401	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C3481	VCCCCZ1HH100D	10p	50V Ceramic	AB	R1402	VRS-CZ1JF470J	47	1/16W Metal Oxide	AA
C4701	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1403	VRS-CZ1JF470J	47	1/16W Metal Oxide	AA
C4702	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1404	VRS-CZ1JF270J	27	1/16W Metal Oxide	AA
C5230	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1408	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7402	RC-KZ0071TAZZ		Capacitor	AD	R1411	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
C7403	RC-KZ0071TAZZ		Capacitor	AD	R1413	VRS-CZ1JF470J	47	1/16W Metal Oxide	AA
C7405	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1414	VRS-CZ1JF270J	27	1/16W Metal Oxide	AA
C7407	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R1415	VRS-CZ1JF225J	2.2M	1/16W Metal Oxide	AA
C7409	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1416	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
C7412	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1417	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7413	VCKYCZ1HB221K	220p	50V Ceramic	AA	R1418	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7414	VCCCCZ1HH330J	33p	50V Ceramic	AB	R1419	VRS-CZ1JF270J	27	1/16W Metal Oxide	AA
C7415	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1431	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C7416	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1438	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C7417	VCKYCY0JB105K	1	6.3V Ceramic	AC	R1439	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
C7418	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1440	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
C7419	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1441	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
C7420	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1442	VRS-CZ1JF750J	75	1/16W Metal Oxide	AA
C7421	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1451	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C7425	VCCCCZ1HH101J	100p	50V Ceramic	AB	R1452	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7426	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R1453	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C7701	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1454	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7702	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1462	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C7703	VCCCCZ1HH100D	10p	50V Ceramic	AB	R1470	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7704	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1701	VRK-SA1JF100J	10	1/16W Metal Composition	AB
C7705	VCCCCZ1HH100D	10p	50V Ceramic	AB					
C7706	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1702	VRK-SA1JF182J	1.8k	1/16W Metal Composition	AC
C7708	VCKYCZ1HB102K	1000p	50V Ceramic	AB					
C7709	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1703	VRK-SA1JF182J	1.8k	1/16W Metal Composition	AC
C7710	VCKYCY1CB104K	0.1	16V Ceramic	AB					
C7711	VCKYCY1CB104K	0.1	16V Ceramic	AB	R1704	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7712	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R1705	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA
C7713	VCKYCZ1EB682K	6800p	25V Ceramic	AB	R1706	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA
C7714	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R1707	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C7715	VCKYCY0JB105K	1	6.3V Ceramic	AC	R1708	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA
C8800	VCKYCY0JB105K	1	6.3V Ceramic	AC	R1709	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA
C8801	VCSATA0JJ336M	33	6.3V Tantalum	AD	R1710	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA
C8802	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1711	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA
C8803	VCKYCY0JB105K	1	6.3V Ceramic	AC	R1712	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C8804	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1713	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
C8805	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1714	VRS-CZ1JF621J	620	1/16W Metal Oxide	AA
C8806	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1715	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8807	VCKYTV1CB105K	1	16V Ceramic	AC	R1716	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8808	VCKYTQ1CB105K	1	16V Ceramic	AC	R1717	VRK-SA1JF330J	33	1/16W Metal Composition	AB
C8809	VCKYCZ1CB103K	0.01	16V Ceramic	AB					
C8810	VCCCCZ1HH330J	33p	50V Ceramic	AB	R1718	VRK-SA1JF102J	1k	1/16W Metal Composition	AB
C8811	VCCCCZ1HH330J	33p	50V Ceramic	AB					
C8812	VCCCCZ1HH330J	33p	50V Ceramic	AB	R1719	VRK-SA1JF472J	4.7k	1/16W Metal Composition	AD
C8813	VCKYTQ1CB105K	1	16V Ceramic	AC					
C8814	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R1720	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
					R1721	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R1722	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R3449	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
R1900	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3450	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1901	VRS-CZ1JF752D	7.5k	1/16W Metal Oxide	AA	R3451	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
R1902	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3452	VRS-CZ1JF820J	82	1/16W Metal Oxide	AA
R1903	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R3453	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1904	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R3454	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1905	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R3455	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1906	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R3457	VRS-CZ1JF820J	82	1/16W Metal Oxide	AA
R1907	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R3458	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1908	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R3459	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1909	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R3460	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1910	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R3462	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1911	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3463	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R1914	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA	R3464	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1915	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R3465	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1916	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA	R3468	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA
R1917	VRS-CZ1JF822D	8.2k	1/16W Metal Oxide	AA	R3469	VRS-CZ1JF390J	39	1/16W Metal Oxide	AA
R1918	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R3470	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
R1919	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA	R3471	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1920	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3472	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R1922	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R3473	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R1923	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R3474	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1925	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R3475	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1926	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3478	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1927	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R3479	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R1928	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R3480	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R1929	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3481	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R1930	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R3482	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
R1931	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R3486	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R1932	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R3488	VRS-CZ1JF821D	820	1/16W Metal Oxide	AA
R1934	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R3489	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1940	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R3490	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1941	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3492	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1942	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R3493	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R1944	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R3494	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R1945	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA	R3495	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1954	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3496	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1955	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R3497	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1981	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA	R3498	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R3401	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA	R3499	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
R3402	VRS-CY1JF000J	0	1/16W Metal Oxide	AA	R5206	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3404	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R5210	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3406	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA	R5211	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3407	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA	R5212	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3409	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA	R5230	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R3410	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA	R5231	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3411	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA	R5232	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA
R3412	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R7401	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R3413	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA	R7402	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R3414	VRS-CZ1JF112J	1.1k	1/16W Metal Oxide	AA	R7403	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R3415	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA	R7406	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3416	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R7413	VRS-CZ1JF512D	5.1k	1/16W Metal Oxide	AA
R3417	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R7415	VRS-CZ1JF560D	56	1/16W Metal Oxide	AB
R3418	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA	R7416	VRS-CZ1JF560D	56	1/16W Metal Oxide	AB
R3419	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7417	VRS-CZ1JF560D	56	1/16W Metal Oxide	AB
R3420	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7418	VRS-CZ1JF560D	56	1/16W Metal Oxide	AB
R3421	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R7419	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
R3423	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA	R7420	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R3424	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA	R7421	VRS-CZ1JF472D	4.7k	1/16W Metal Oxide	AB
R3425	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R7423	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA
R3426	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7424	VRS-CZ1JF472D	4.7k	1/16W Metal Oxide	AB
R3427	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	R7426	VRS-CZ1JF821D	820	1/16W Metal Oxide	AA
R3428	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R7427	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R3429	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA	R7441	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3430	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R7442	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3432	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R7443	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3434	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7444	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3435	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	R7445	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3436	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA	R7446	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3437	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R7447	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3442	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R7448	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R3443	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R7472	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3445	VRS-CZ1JF152D	1.5k	1/16W Metal Oxide	AB	R7701	VRK-SB1FF104J	100k	0.0315W	AD
R3446	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA				Metal Composition	
R3447	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R7702	VRK-SB1FF102J	1k	0.0315W	AC	SC5204	QSOCN2806TAN1		Socket, 28Pin	AG
			Metal Composition		SC8801	QSOCN2092TAZZ		Socket, 20Pin	AE
R7703	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	P1900	QCNCM7069TAZZ		Connector, 70Pin	AH
R7704	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	DUNTK2965QA01 CAMERA HEAD PWB UNIT				
R7706	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA					
R7707	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA					
R7708	VRK-SA1JF103J	10k	1/16W	AB					
			Metal Composition						
R7709	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	INTEGRATED CIRCUITS				
R7710	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA					
R7711	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA					
R7712	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA					
R7713	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA					
R7714	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC12	VHiLR38610/-1		LR38610, Timing Generator	AP
R7715	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC13	VHiUPD16510-1		UPD16510, V-Driver	AR
R8802	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC101	VHiCXA2096N-1		CXA2096N, CDS/AGC	AQ
R8803	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA	IC501	VHiMB8346BV-1		MB8346BV, D/A-Converter	AN
R8804	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	IC551	VHiMM1449XQ-1		MM1449XQ, Lens Driver	AT
R8805	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	IC552	VHiNJM2902V-1		NJM2902V, Hall-Device	AD
R8806	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC553	VHiNJM3414V-1		Drive/Amp Iris Drive	AF
R8807	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA					
R8808	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA	TRANSISTORS				
R8809	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA					
R8810	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA					
R8811	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA					
R8812	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA					
R8813	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	Q1	VS2SK508///-1		2SK508	AE
R8816	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	Q2	VS2SC4627CD-1		2SC4627CD	AB
R8817	VRK-SA1JF564J	560k	1/16W	AC	Q11	VS2SC5383F/-1		2SC5383F	AB
			Metal Composition		Q12	VSHN2C01FU/-1		HN2C01FU	AC
R8818	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB	DIODES				
R8819	VRS-CZ1JF274J	270k	1/16W Metal Oxide	AA					
R8820	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB					
R8822	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R8827	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA					
R8846	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	D1	VHDMC2852///-1		MC2852	AB
R8847	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	D551	VHDMC2852///-1		MC2852	AB
R8848	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	PACKAGED CIRCUIT				
R8849	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8850	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8851	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8852	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8853	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	X11	RCRSZ0055TAZZ		Crystal, CRSZ0055TA	AS
R8854	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	COILS				
R8855	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8856	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA					
R8857	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R8878	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R8879	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	L12	VPAWM100K1R5N		Peaking, 10μH	AC
R8880	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	L101	VPAWM100K1R5N		Peaking, 10μH	AC
R8881	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	L551	VPBWM150K1R0N		Peaking, 15μH	AC
R8882	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	CAPACITORS				
R8884	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R8886	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA					
R8897	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA					
R8898	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA					
R8899	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	C1	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R9923	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	C2	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R9924	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	C3	VCSATE1VJ335M	3.3	35V Tantalum	AD
R9927	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA	C4	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R9929	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C5	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R9930	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA	C7	VCKYTV1EB104K	0.1	25V Ceramic	AB
MISCELLANEOUS PARTS					C8	RC-KZ0072TAZZ		Capacitor	AC
					C12	VCSATA1AJ106M	10	10V Tantalum	AC
					C13	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C14	VCSATA1AJ106M	10	10V Tantalum	AC
					C15	VCSATE1VJ335M	3.3	35V Tantalum	AD
FB7401	RBLN-0057TAZZ		Balun, BLN-0057TA	AC	C16	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
FB7402	RBLN-0057TAZZ		Balun, BLN-0057TA	AC	C17	VCKYCZ1CB103K	0.01	16V Ceramic	AB
FB8800	RBLN-0119TAZZ		Balun, BLN-0119TA	AC	C18	VCSATA1CJ106M	10	16V Tantalum	AD
FB8802	RBLN-0119TAZZ		Balun, BLN-0119TA	AC	C19	VCKYCZ1CB103K	0.01	16V Ceramic	AB
J5201	QJAKE0065TAZZ		Jack, 10Pin	AH	C20	VCKYCZ1CB103K	0.01	16V Ceramic	AB
J7401	QJAKZ0072TAZZ		Jack, 4Pin	AG	C21	VCSATA0JJ156M	15	6.3V Tantalum	AC
P5201	QPLGN0276TAZZ		Plug, 2Pin	AD	C22	VCKYCZ1CB103K	0.01	16V Ceramic	AB
SC3301	QCNCW8080TAZZ		Connector, 80Pin	AH	C23	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
SC5201	QSOCN2071TAZZ		Socket, 20Pin	AD	C24	VCSATE1VJ335M	3.3	35V Tantalum	AD
SC5202	QSOCN5111TAN1		Socket, 51Pin	AH	C26	VCKYCZ1HB102K	1000p	50V Ceramic	AB
SC5203	QCNCW9188TAZZ		Connector, 100Pin	AL	C27	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C28	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C29	VCSAPR0JJ106M	10	6.3V Tantalum	AD
					C31	VCSATA1CJ106M	10	16V Tantalum	AD
					C34	VCSATE1VJ335M	3.3	35V Tantalum	AD
					C35	VCKYCY1EF104Z	0.1	25V Ceramic	AA
					C36	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C102	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C103	VCKYCZ1EF223Z	0.022	25V Ceramic	AB
					C104	VCKYTV1CB105K	1	16V Ceramic	AC
					C105	VCKYTV1CB105K	1	16V Ceramic	AC
					C106	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
					C107	VCSATA0JJ156M	15	6.3V Tantalum	AC
					C108	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C109	VCKYCZ1CB103K	0.01	16V Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C110	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R565	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C111	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R566	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
C112	VCSAPROJJ106M	10	6.3V Tantalum	AD	R567	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C113	VCSAPROJJ106M	10	6.3V Tantalum	AD	R568	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C501	VCSATA1AJ106M	10	10V Tantalum	AC	R569	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C551	VCSATA1CJ106M	10	16V Tantalum	AD	R570	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C552	VCKYCZ1EB472K	4700p	25V Ceramic	AB	R571	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C553	VCKYCY1EB183K	0.018	25V Ceramic	AA	R572	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C554	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R573	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C555	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R574	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
C556	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R575	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C557	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R576	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C558	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R577	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
C559	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R578	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
C560	VCKYCY0JF105Z	1	6.3V Ceramic	AB	R579	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C561	VCKYCZ1EB472K	4700p	25V Ceramic	AB	R580	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C562	VCKYCZ1EB472K	4700p	25V Ceramic	AB	R581	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB
C563	VCKYCZ1EB472K	4700p	25V Ceramic	AB	R582	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA
C565	VCSATA1AJ106M	10	10V Tantalum	AC	R583	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C566	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R584	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
C567	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R585	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA
C568	VCKYCZ1CB103K	0.01	16V Ceramic	AB	MISCELLANEOUS PARTS				
C569	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	FB11	RBLN-0051TAZZ	Balun, BLN-0051TA		AC
C570	VCKYCZ1CB103K	0.01	16V Ceramic	AB	SC501	QCNCW5068TAZZ	Connector, 50Pin		AG
C571	VCKYCZ1CB103K	0.01	16V Ceramic	AB	SC551	QSOCN0203FJZZ	Socket, 24Pin		AE
C572	VCCCCZ1HH151J	150p	50V Ceramic	AB	SW501	QSW-P0095TAZZ	Switch, JOG SW		AH
C573	VCKYCY1AB224K	0.22	10V Ceramic	AB					
C574	VCKYCZ1CB103K	0.01	16V Ceramic	AB					

RESISTORS

R2	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R3	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R4	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R5	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R6	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R7	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R11	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R12	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R13	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R14	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R15	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
R16	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R17	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R18	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R19	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R23	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R24	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R25	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R26	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R27	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R28	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R101	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB
R103	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA
R106	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R107	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R108	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R109	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R110	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R111	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
R112	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R501	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R551	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R552	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
R553	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB
R554	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R555	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
R556	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
R557	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R558	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R559	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R560	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R561	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R562	VRS-CZ1JF912J	9.1k	1/16W Metal Oxide	AB
R563	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R564	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA

**DUNTK2966QA01
POWER2 PWB UNIT****INTEGRATED CIRCUITS**

△ CP1	VHiCCP2B25/-1	CCP2B25	AD
△ CP2	VHiCCP2B25/-1	CCP2B25	AD
IC901	VHiMB3825A/-1	MB3825A, Switching Control(Main)	AR
IC902	VHiMB3788FV-1	MB3788FV, Switching Control(Sub)	AM
IC9900	VHiNJM2143R-1	NJM2143R, 2.8V/2.4V Reg	AE

TRANSISTORS

Q900	VSCPH6701/-1	CPH6701	AE
Q901	VSCPH6701/-1	CPH6701	AE
Q902	VSCPH6701/-1	CPH6701	AE
Q906	VSCPH6701/-1	CPH6701	AE
Q909	VSCPH6701/-1	CPH6701	AE
Q910	VSCPH6701/-1	CPH6701	AE
Q911	VSCPH6701/-1	CPH6701	AE
Q913	VSCPH3109/-1	CPH3109	AD
Q9902	VS2SD1979S/-1	2SD1979S	AE
Q9903	VSFMMT717/-1	FMMT717	AE

DIODES

D901	RH-EX1394CEZZ	Zener, EX1394CE	AB
D913	VHDMA4S159/-1	MA4S159	AC
D914	VHDMA4S159/-1	MA4S159	AC

COILS AND TRANSFORMER

L910	RCiLP0323TAZZ	Coil, CiLP0323TA	AD
L911	RCiLP0311TAZZ	Coil, CiLP0311TA	AE
L912	RCiLP0311TAZZ	Coil, CiLP0311TA	AE
L913	VPBWM2R2MR20N	Peaking, 2.2μH	AC
L915	RCiLP0311TAZZ	Coil, CiLP0311TA	AE
L916	VPBAM2R2M090N	Peaking, 2.2μH	AC
L917	VPM6N100MR75N	Peaking, 10μH	AC
L918	VPM6N100MR75N	Peaking, 10μH	AC
L919	VPM6N100MR75N	Peaking, 10μH	AC
L920	VPM6N100MR75N	Peaking, 10μH	AC
L921	RCiLP0323TAZZ	Coil, CiLP0323TA	AD
L922	RCiLP0313TAZZ	Coil, CiLP0313TA	AE
L923	RCiLP0313TAZZ	Coil, CiLP0313TA	AE
L924	RCiLP0311TAZZ	Coil, CiLP0311TA	AE

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
L925	VPBAM2R2M090N		Peaking, 2.2μH	AC	C9901	VCKYTV1AB105K	1	10V Ceramic	AD
L926	RCiLP0323TAZZ		Coil, CiLP0323TA	AD	C9903	RC-KZ0083TAZZ		Capacitor	AD
L927	RCiLP0311TAZZ		Coil, CiLP0311TA	AE	C9906	VCKYTV1AB105K	1	10V Ceramic	AD
L9901	VPBWM2R2MR20N		Peaking, 2.2μH	AC	C9907	VCKYTV1AB105K	1	10V Ceramic	AD
L9902	VPBWM2R2MR20N		Peaking, 2.2μH	AC	C9908	VCKYTV1AB105K	1	10V Ceramic	AD
L9904	VPBWM4R7MR30N		Peaking, 4.7μH	AC	C9909	VCKYTV1AB105K	1	10V Ceramic	AD
L9905	VPBWM4R7MR30N		Peaking, 4.7μH	AC	C9910	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
L9906	VPBWM4R7MR30N		Peaking, 4.7μH	AC	C9919	VCKYCZ1HB102K	1000p	50V Ceramic	AB
L9907	VPBWM2R2MR20N		Peaking, 2.2μH	AC	C9920	VCSATE1AJ476M	47	10V Tantalum	AD
L9908	VPBWM2R2MR20N		Peaking, 2.2μH	AC	C9921	RC-KZ0083TAZZ		Capacitor	AD
△ T910	RTRNZ0160TAZZ		Power Transformer	AF					
CAPACITORS					RESISTORS				
C900	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R900	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C901	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R901	VRS-CZ1JF433D	43k	1/16W Metal Oxide	AA
C902	VCKYCY1CB473K	0.047	16V Ceramic	AA	R902	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C903	VCKYCZ1HB332K	3300p	50V Ceramic	AA	R903	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C904	VCKYTV1AB105K	1	10V Ceramic	AD	R904	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C905	VCKYCZ1HB222K	2200p	50V Ceramic	AB	R905	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
C906	VCCCCZ1HH101J	100p	50V Ceramic	AB	R906	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
C907	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R907	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
C908	VCKYTV1AB105K	1	10V Ceramic	AD	R908	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C909	VCKYCY1HB103K	0.01	50V Ceramic	AA	R909	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C910	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R910	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
C911	VCKYCZ1AF104Z	0.1	10V Ceramic	AD	R911	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C912	VCKYTV1AB105K	1	10V Ceramic	AD	R912	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C913	VCKYTV1AB105K	1	10V Ceramic	AD	R913	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
C914	VCKYCY1CB104K	0.1	16V Ceramic	AB	R914	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
C915	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R915	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C916	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R916	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
C917	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R917	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA
C918	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R918	VRS-CZ1JF113D	11k	1/16W Metal Oxide	AA
C919	VCKYCY1HB102K	1000p	50V Ceramic	AA	R919	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C920	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R920	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C921	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R921	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C922	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R922	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA
C923	VCKYTV1AB105K	1	10V Ceramic	AD	R923	VRS-CZ1JF182D	1.8k	1/16W Metal Oxide	AB
C925	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R924	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB
C926	VCKYCY1AF105Z	1	10V Ceramic	AC	R925	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C927	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R926	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C928	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R927	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C929	VCKYCY1CB104K	0.1	16V Ceramic	AB	R928	VRS-TV1JD000J	0	1/16W Metal Oxide	AA
C930	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R929	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
C931	VCKYCY1EB223K	0.022	25V Ceramic	AA	R931	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C932	VCKYCZ1HB471K	470p	50V Ceramic	AB	R932	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
C933	VCKYCY1CB104K	0.1	16V Ceramic	AB	R933	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C934	VCKYCY1EB223K	0.022	25V Ceramic	AA	R934	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB
C935	RC-KZ0044TAZZ		Capacitor	AD	R935	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C936	RC-KZ0075TAZZ		Capacitor	AC	R936	VRS-CZ1JF682D	6.8k	1/16W Metal Oxide	AB
C937	VCKYTV1AB105K	1	10V Ceramic	AD	R937	VRS-CZ1JF752D	7.5k	1/16W Metal Oxide	AA
C938	RC-KZ0070TAZZ		Capacitor	AD	R938	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C939	RC-KZ0099TAZZ		Capacitor	AD	R939	VRS-CZ1JF471D	470	1/16W Metal Oxide	AA
C940	VCKYTV1AB105K	1	10V Ceramic	AD	R940	VRS-CZ1JF471D	470	1/16W Metal Oxide	AA
C941	RC-KZ0044TAZZ		Capacitor	AD	R941	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C942	RC-KZ0075TAZZ		Capacitor	AC	R942	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C943	RC-KZ0072TAZZ		Capacitor	AC	R943	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
C944	VCKYTV1EB104K	0.1	25V Ceramic	AB	R944	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C945	VCKYTV1AB105K	1	10V Ceramic	AD	R947	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
C946	VCKYTV1CF105Z	1	16V Ceramic	AB	R948	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C947	RC-KZ0070TAZZ		Capacitor	AD	R950	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB
C948	VCKYTV1CB105K	1	16V Ceramic	AC	R951	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
C949	VCKYTV1CF105Z	1	16V Ceramic	AB	R952	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C950	RC-KZ0072TAZZ		Capacitor	AC	R953	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C951	VCKYTV1EB104K	0.1	25V Ceramic	AB	R954	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
C952	RC-KZ0070TAZZ		Capacitor	AD	R956	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA
C953	RC-KZ0069TAZZ		Capacitor	AE	R957	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
C954	RC-KZ0070TAZZ		Capacitor	AD	R958	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA
C955	VCKYTV1AB105K	1	10V Ceramic	AD	R959	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C956	RC-KZ0044TAZZ		Capacitor	AD	R9903	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
C957	RC-KZ0075TAZZ		Capacitor	AC	R9904	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
C958	RC-KZ0075TAZZ		Capacitor	AC	R9905	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C959	RC-KZ0044TAZZ		Capacitor	AD	R9906	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C960	RC-KZ0070TAZZ		Capacitor	AD	R9908	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C961	VCKYCY1CB103K	0.01	16V Ceramic	AB	R9909	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB
C980	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R9910	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
					R9912	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R9913	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C822	VCKY CZ1CB103K	0.01	16V Ceramic	AB
R9915	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB	C823	VCKY CZ1CB103K	0.01	16V Ceramic	AB
MISCELLANEOUS PARTS					C824	VCKY CZ1CB103K	0.01	16V Ceramic	AB
	PSLDM9140TAZZ		Shield	AD	C825	VCCCCZ1HH6R0D	6p	50V Ceramic	AA
FB9900	RBLN-0119TAZZ		Balun, BLN-0119TA	AC	C826	VCKY CZ1EB682K	6800p	25V Ceramic	AB
FB9901	RBLN-0119TAZZ		Balun, BLN-0119TA	AC	C828	VCSATA1AJ335M	3.3	10V Tantalum	AC
SC900	QCNCW2080TAZZ		Connector, 20Pin	AF	C830	VCKY CZ1CB103K	0.01	16V Ceramic	AB
SC901	QSOCN1092TAZZ		Socket, 10Pin	AD	C831	VCKY CZ1CB103K	0.01	16V Ceramic	AB
SC902	QCNCW7068TAZZ		Connector, 70Pin	AG	C832	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C833	VCCCCZ1HH390J	39p	50V Ceramic	AB
					C834	VCKY TV1CB474K	0.47	16V Ceramic	AC
					C835	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C836	VCSATN1AJ106M	10	10V Tantalum	AD
					C837	VCCCCZ1HH560J	56p	50V Ceramic	AB
					C838	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C839	VCKY CY0JB105K	1	6.3V Ceramic	AC
					C841	VCKY CY1CF334Z	0.33	16V Ceramic	AA
					C842	VCKY CZ1HB681K	680p	50V Ceramic	AB
					C844	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C847	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C848	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C850	VCSATE1AJ336M	33	10V Tantalum	AG
					C1800	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1801	VCSATE1AJ336M	33	10V Tantalum	AG
					C1803	VCSATE1CJ226M	22	16V Tantalum	AE
					C1804	VCKY CZ1HB561K	560p	50V Ceramic	AC
					C1805	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1806	VCKY CZ1HB102K	1000p	50V Ceramic	AB
					C1807	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1808	VCKY CY0JB105K	1	6.3V Ceramic	AC
					C1809	VCCCCZ1HH680J	68p	50V Ceramic	AB
					C1810	VCCCCZ1HH8R0D	8p	50V Ceramic	AB
					C1811	VCCCCZ1HH220J	22p	50V Ceramic	AB
					C1812	VCKY CZ1HB102K	1000p	50V Ceramic	AB
					C1813	VCKY TV1CB105K	1	16V Ceramic	AC
					C1814	VCCCCZ1HH560J	56p	50V Ceramic	AB
					C1816	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1817	VCKY CY0JB105K	1	6.3V Ceramic	AC
					C1818	VCSATA1DJ475M	4.7	20V Tantalum	AC
					C1819	VCKY CY1CF224Z	0.22	16V Ceramic	AA
					C1820	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1821	VCKY CY0JB105K	1	6.3V Ceramic	AC
					C1822	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C1824	VCCCCZ1HH101J	100p	50V Ceramic	AB
					C1825	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1827	VCKY CY1CF104Z	0.1	16V Ceramic	AA
					C1829	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C1830	VCKY CZ1AB104K	0.1	10V Ceramic	AB
					C5800	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
					C5803	VCKY CZ1CB103K	0.01	16V Ceramic	AB
					C5804	RC-KZ0055TAZZ		Capacitor	AD
					C5806	VCKY CY1HB332K	3300p	50V Ceramic	AA
					C5809	VCFRED1HM183J	0.018	50V	AD
					C5811	RC-KZ0350CEZZ		Capacitor	AD
					RESISTORS				
C800	VCSATE1CJ226M	22	16V Tantalum	AE	R800	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C803	VCKY CZ1AF104Z	0.1	10V Ceramic	AB	R801	VRS-CZ1JF304D	300k	1/16W Metal Oxide	AA
C804	VCKY CZ1AF104Z	0.1	10V Ceramic	AB	R802	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C806	VCKY CY0JB105K	1	6.3V Ceramic	AC	R803	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C807	VCKY CY1CF104Z	0.1	16V Ceramic	AA	R805	VRS-CZ1JF363D	36k	1/16W Metal Oxide	AA
C808	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R806	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA
C809	VCKY CY0JB105K	1	6.3V Ceramic	AC	R807	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB
C810	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R808	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
C811	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R811	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
C812	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R813	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA
C813	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R814	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB
C814	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R815	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB
C815	VCKY CY0JB105K	1	6.3V Ceramic	AC	R816	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
C816	VCKY TV1AB105K	1	10V Ceramic	AD	R821	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
C817	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R822	VRS-CZ1JF124D	120k	1/16W Metal Oxide	AA
C818	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R824	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB
C819	VCKY CY0JB105K	1	6.3V Ceramic	AC	R825	VRS-CZ1JF163D	16k	1/16W Metal Oxide	AA
C820	VCKY CZ1CB103K	0.01	16V Ceramic	AB	R827	VRS-CZ1JF122D	1.2k	1/16W Metal Oxide	AB
C821	VCKY CY0JB105K	1	6.3V Ceramic	AC	R829	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R832	VRS-CZ1JF184J	180k	1/16W Metal Oxide	AA	R5810	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R835	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA	R5811	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R838	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB	R5812	VRS-CZ1JF271D	270	1/16W Metal Oxide	AB
R841	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R5813	VRS-CZ1JF271D	270	1/16W Metal Oxide	AB
R842	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
R843	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB	SC800	QSOCN1092TAZZ		Socket, 10Pin	AD
R844	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA	SC801	QSOCN1092TAZZ		Socket, 10Pin	AD
R845	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB	SC802	QSOCN1092TAZZ		Socket, 10Pin	AD
R846	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	SC1800	QSOCN2492TAZZ		Socket, 24Pin	AE
R847	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	SC5800	QSOCN0412TAN1		Socket, 4Pin	AF
R849	VRS-CY1JF106J	10M	1/16W Metal Oxide	AA	RAMP-0033TAN1 HEAD AMP PWB UNIT				
R850	VRS-CZ1JF274J	270k	1/16W Metal Oxide	AA					
R852	VRS-CZ1JF363D	36k	1/16W Metal Oxide	AA	INTEGRATED CIRCUITS				
R853	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	IC301	VHiBH7275KV-1		BH7275KV, REC PB Amp IC	AU
R854	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC302	VHiM24C04W6-1		M24C04W6, E ² PROM IC	AE
R855	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	TRANSISTORS				
R857	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	Q302	VS2SC4738Y/-1		2SC4738Y	AA
R858	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB		or			
R859	VRS-CZ1JF683D	68k	1/16W Metal Oxide	AB		VS2SC4617B/-1		2SC4617B	AA
R860	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA		or			
R861	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA		VS2SC5383F/-1		2SC5383F	AB
R862	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	Q303	VS2SC4738Y/-1		2SC4738Y	AA
R870	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA		or			
R871	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA		VS2SC4617B/-1		2SC4617B	AA
R1800	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB		or			
R1801	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA		VS2SC5383F/-1		2SC5383F	AB
R1802	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA		VS2SC4738Y/-1		2SC4738Y	AA
R1803	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA		or			
R1804	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA		VS2SC4617B/-1		2SC4617B	AA
R1805	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA		or			
R1806	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA		VS2SC5383F/-1		2SC5383F	AB
R1807	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	COIL				
R1808	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB	L301	VPAWM4R7MR70N		Coil, 4.7μH	AC
R1809	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	CAPACITORS				
R1810	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	C301	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1812	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	C302	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R1813	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C303	VCSATE1AJ336M	33	10V Tantalum	AG
R1814	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	C304	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1815	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	C305	VCCCCY1HH331J	330p	50V Ceramic	AA
R1816	VRS-CZ1JF470J	47	1/16W Metal Oxide	AA	C306	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1817	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	C307	VCCCCY1HH331J	330p	50V Ceramic	AA
R1818	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	C308	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1819	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	C309	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1822	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	C310	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R1823	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	C311	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R1824	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	C312	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1826	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	C313	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1827	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	C314	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1828	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB	C315	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1830	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	C318	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1832	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	C319	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1835	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	C320	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1836	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	C321	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1837	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	C322	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1838	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	C323	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R1840	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	C324	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R1841	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA	C327	VCKYCZ1EB472K	4700p	25V Ceramic	AB
R1842	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	C329	VCSATA1AJ106M	10	10V Tantalum	AC
R1843	VRS-CZ1JF512J	5.1k	1/16W Metal Oxide	AB	C330	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
R1844	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	C331	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1845	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C332	VCKYCZ1EB472K	4700p	25V Ceramic	AB
R1846	VRS-CZ1JF363D	36k	1/16W Metal Oxide	AA	C333	VCKYCZ1CB822K	8200p	16V Ceramic	AB
R1847	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	C340	VCCCCZ1HH5R0C	10p	50V Ceramic	AC
R1848	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA	C342	VCCCCZ1HH5R0C	10p	50V Ceramic	AC
R1849	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C343	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1850	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	C344	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1854	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	C345	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
R1855	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB	RESISTORS				
R1856	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	R304	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1857	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA					
R1858	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA					
R1859	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R5803	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB					
R5807	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA					
R5808	VRS-CZ1JF182D	1.8k	1/16W Metal Oxide	AB					

Ref. No.	Part No.	★	Description	Code
R308	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R309	VRS-CZ1JF512J	5.1k	1/16W Metal Oxide	AB
R310	VRS-CZ1JF433J	43k	1/16W Metal Oxide	AA
R311	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R312	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R313	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R314	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R315	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R316	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R317	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA
R318	VRS-CZ1JF513J	51k	1/16W Metal Oxide	AA
R319	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R320	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R321	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R324	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R330	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA
R332	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R333	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R377	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R380	VRS-TV1JD100J	10	1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

P306	QCNCM8082TAZZ	Plug, 80Pin	AK
SC301	QSOCN0806TAN1	Connector, 8Pin	AL
SC302	QSOCN0606TAN1	Connector, 6Pin	AK
SC303	QSOCN1006TAN1	Connector, 10Pin	AE
SC304	QSOCN0706TAN1	Connector, 7Pin	AE
SC305	QSOCN1887TAZZ	Connector, 18Pin	AD
SC306	QSOCN1886TAZZ	Connector, 18Pin	AD

**RUNTK0371TAZZ
JOINT PWB UNIT****MISCELLANEOUS PARTS**

P2006	QPLGN0276TAZZ	Plug, 2Pin	AD
P2008	QPLGN0376TAZZ	Plug, 3Pin	AD
P2009	QPLGN0276TAZZ	Plug, 2Pin	AD
P2010	QPLGN0476TAZZ	Plug, 4Pin	AD
SC2001	QSOCN2887TAZZ	Socket, 28Pin	AE
SC2002	QSOCN2887TAZZ	Socket, 28Pin	AE
SC2003	QSOCN1087TAZZ	Socket, 10Pin	AC
SC2004	QSOCN1087TAZZ	Socket, 10Pin	AC
SC2005	QSOCN1087TAZZ	Socket, 10Pin	AC
SC2007	QSOCN0560TAZZ	Socket, 5Pin	AC
SC2011	QCNCW1481TAZZ	Socket, 14Pin	AE
SW2001	QSW-M0047GEZZ	Switch, LCD SW	AE
	99GK161R002	Li-BAT(+)	AC
	99GHUSC063	Li-BAT(-)	AC
TP2001	QLUGP0111TAFW	Tip	AA
TP2002	QLUGP0111TAFW	Tip	AA
TP2003	QLUGP0111TAFW	Tip	AA

Ref. No.	Part No.	★	Description	Code
MECHANISM PARTS				
301	LCHSM0167GEZZ		Main Chassis Ass'y	AQ
302	MLEVF0501GEFW		Eject Lever	AD
303	MLEVF0502GEFW		Pinch Control Lever	AD
304	NGERH3050GEFW		Main Cam	AD
305	MLEVF0503GEZZ		Shifter Drive Lever Ass'y	AE
306	MLEVF0505GEFW		Loading Lever	AD
307	MARMM0130GEZZ		S Loading Arm Ass'y	AF
308	MARMM0131GEZZ		Tu Loading Arm Ass'y	AF
309	MLEVF0508GEFW		T Arm Control Lever	AD
310	MLEVF0509GEFW		AHC Control Lever	AC
311	LANGG9106GEFW		Tu Guide Cam	AD
312	LANGF9016GEZZ		Intermediate Gear	AG
			ANG Ass'y	
313	MARMM0132GEZZ		Swing Arm Ass'y	AG
314	LANGJ0040GEFW		Mechanism Fixing Angle	AH
320	CANGQ1044GE02		Down SW-ANG Ass'y	AP
321	LANGQ1044GEZZ		Down SW-ANG Ass'y	AE
322	QPBWH5781GEZZ		Dew Sensor FPC	AH
323	QSW-M0016TAZZ		Down SW	AD
324	RDTCH0039GEZZ		Dew Sensor	AD
325	ZTAPEZZ212010M		Dew FPC Stopper	AB
326	LANGG9109GEFW		Cap FPC Stopper	AC
330	CCHSS0047GE02		Slide Chassis Ass'y with FPC Sensor	AZ
331	LCHSS0047GEZZ		Slide Chassis Ass'y	AQ
332	CPWBH5782GE01		Sensor FPC Ass'y	AX
333	QPBWH5782GEZZ		Sensor FPC	AN
334	LHLDP1174GEZZ		S-LED Holder	AC
335	LHLDP1175GEZZ		Tu-LED Holder	AC
336	PGiDM0157GEZZ		Lid Opener	AB
337	LHLDZ2023GEZZ		Sensor FPC Guide	AB
338	QSW-M0047GEZZ		Recognition SW	AE
339	QTANZ0003GEZZ		Mic Contact	AE
340	RH-PX0180TAZZ		Cassette LED	AE
341	RH-PX0181TAZZ		S/E Sensor	AF
342	RDTCM0002TAZZ		Reel Sensor	AE
343	PSHEP0015GEZZ		Sensor FPC Reinforcing Plate	AB
351	MLEVF0510GEZZ		Tension Arm Ass'y	AG
352	MLEVF0511GEZZ		Tu Guide Arm Ass'y	AG
353	MLEVF0512GEZZ		Brake Shifter Ass'y	AE
354	LBNDK3022GEZZ		Tension Band Ass'y	AF
355	LANGA0073GEZZ		Reel Cover Ass'y	AG
356	LANGJ0038GEFW		T Spring Hanging ANG	AC
357	MLEVP0302GEZZ		Swing Arm Release Lever	AC
361	MLEVP0296GEZZ		Pinch Drive Lever	AB
362	PGiDM0156GEZZ		Guide Rail	AC
364	NGERH1300GEZZ		Intermediate Gear A Ass'y	AE
365	NGERH1301GEZZ		Intermediate Gear B Ass'y	AB
366	NPLYV0164GEZZ		Intermediate Pulley Ass'y	AC
367	NPLYV0165GEZZ		Center Pulley Ass'y	AC
368	PCOVP1024GEZZ		Down SW Cover	AB
369	NGERH1302GEZZ		AHC Cam	AB
370	NGERH1303GEZZ		Coupling Gear	AB
371	NGERH1304GEZZ		Sub Cam	AC
372	NGERH1305GEZZ		S Loading Gear	AC
373	NGERH1306GEZZ		Tu Loading Gear	AC
374	MLEVP0308GEZZ		S Main Brake	AB
375	MLEVP0309GEZZ		Tu Main Brake	AB
376	LHLDX1033GEZZ		S Cassette Stay	AB
377	LHLDZ2024GEZZ		FPC Cover	AB
378	PGiDM0166GEZZ		SL Chassis Holder-S	AC
379	PGiDM0167GEZZ		Lock Lever Guide	AC
381	PGiDP0031GEFW		Tu Pole	AD
382	PGiDS0046GEFW		T Roller Upper Flange	AE
383	PGiDS0047GEFW		T Roller Bottom Flange	AE
384	NSFTL0761GEFW		T Roller Inner	AE
385	PGiDP0042GEFW		S Guide Sleeve	AD
386	PGiDM0170GEZZ		Slide Chassis Guide	AC
390	MSPRD0184GEFJ		Swing Arm Release SPR.	AC
391	MSPRT0417GEFJ		Main Brake SPR.	AB
392	MSPRT0418GEFJ		T Arm SPR.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
393	MSPRD0178GEFJ		Tu Guide Arm SPR.	AB	CABINET PARTS LIST				
394	MSPRD0179GEFJ		Pinch Lever Return SPR.	AB	1-1	DCABA6201TAK4		K.S. Cabinet Ass'y	BB
395	MSPRD0180GEFJ		S Pressure SPR.	AB				(PD3AS/AH)	
396	MSPRD0181GEFJ		Tu Pressure SPR.	AB	1-1	DCABA6201TAK5		K.S. Cabinet Ass'y	BB
397	MSPRC0220GEFJ		Guide Adjustment SPR.	AA				(PD3AE)	
398	MSPRC0221GEFJ		Drum Fixing SPR.	AA	1-1-2	LANGK0444TAFW		L.L. Angle	AE
399	MSPRP0185GEZZ		PB Guide SPR.	AC	1-1-3	LANGK0445TA00		Angle for Handstrap.F	AF
401	LX-WZ1071GE02		CW Ø 0.7 Ø 1.8t0.1	AC	1-1-4	LANGK0473TA00		Angle for Handstrap.R	AG
402	LX-WZ1104GE06		CW Ø 0.7 Ø 2.2t0.25	AB	1-1-5	LSTYM0031TAZZ		Stay.F.Ass'y	AQ
403	LX-WZ1029GE00		CW Ø 1.2 Ø 3t0.25	AA	1-1-6	LSTYM0032TAZZ		Stay.R.Ass'y	AM
411	LZ-WZ1105GE00		W Ø 1.2 Ø 2.5t0.13	AA	1-1-7	PSHEP0109TAZZ		Zoom FPC Guide	AC
412	LZ-WZ1106GE00		W Ø 1.2 Ø 2.5t0.2	AA	1-1-8	PSPAG0124TA00		Floating Rubber	AC
413	XWHJZ12-03025		W Ø 1.2 Ø 2.5t0.3	AA	1-1-9	UBNDT0128TASA		Handstrap	AL
414	XWHJZ12-04025		W Ø 1.2 Ø 2.5t0.4	AA	1-1-11	PMLT-0180TAZZ		Sound Insulation Sheet	AA
415	XWHJZ12-05025		W Ø 1.2 Ø 2.5t0.5	AA	1-2	GFTAC3006TASA		Cassette Lid	BE
420	LX-BZ3202GEFF		Swing Arm Release	AC	1-3	HINDP0201TASA		Cassette Lid Plate	AD
			Lever Fixing Screw		1-4	JKNBP0171TASA		Open Pinch	AD
421	LHLDZ2025GEZZ		Intermediate Gear Stopper	AB	1-5	LANGK0447TAZZ		Cassette Lid Lock Ass'y	AM
428	LX-NZ0102GEFW		S Guide Hexagon Nut	AC	1-6	LHLDZ1488TA00		Open Button Holder	AD
429	LX-BZ3203GEFF		Type 1 Minuteness	AB	1-7	PMLT-0172TAZZ		Cassette Lid Spacer A	AB
			Screw M1.4 x L1		1-8	PMLT-0173TAZZ		Cassette Lid Spacer B	AB
430	LX-BZ3185GEFN		Screw M1.4 x L2	AB	1-9	PSHEP0105TAZZ		Zoom FPC Cover	AE
431	LX-BZ3135GEFF		Screw M1.4 x L1	AA	1-10	QSW-Z0309TAZZ		Eject Switch	AG
432	LX-BZ3201GEFF		Special Head	AB	1-11	QSW-Z0310TAZZ		Zoom Unit	AT
			Screw M1.4 x L2		1-13	LHLDZ1505TA00		Lid Lock Holder	AD
433	LX-BZ3132GEFF		Special Head	AA				(since about 5001camcorders)	
			Screw M1.4 x L1.5		1-14	LHLDE1004TASA		Belte Stopper	AC
434	LX-BZ3131GEFN		Screw M1.4 x L1.6	AA	1-15	PMLT-0181TAZZ		Cassette Lid Spacer C	
435	LX-HZ3089GEFF		S Tight Screw M1.4 x L2	AA	2-1	DCABB6203TAK2		K.S. Cabinet B Service	AY
436	LX-HZ3076GEFF		S Tight Screw M1.4 x L3	AA				(PD3AS/AH)	
437	LX-HZ3088GEFF		L Motor Installation	AB	2-1	DCABB6203TAK3		K.S. Cabinet B Service	AY
			Screw					(PD3AE)	
438	LX-BZ3225GEFF		Drum Installation Screw	AC	2-1-2	JBTN-0305TASA		Menu/Gamma Button	AG
439	LX-BZ3181GEFN		GR Lock Screw	AD	2-1-3	PSHEP0117TAZZ		Tilt Section Blind Sheet	AC
440	LX-HZ3084GEFF		S Tight Screw M1.4 x L4	AC	2-1-4	PSPAZ0262TAZZ		Rubber for LCD	AA
441	QPWBH5780GEZZ		Mode FPC	AE	2-2	LANGQ0209TAFW		RS232C Fixing Metal	AF
451	LPOLM0065GEZZ		Sup Pole Base Ass'y	AK	2-3	LHLDZ1489TAZZ		Speaker Holder	AD
452	LPOLM0066GEZZ		Tu Pole Base Ass'y	AK	2-4	QSW-Z0311TAZZ		Operation Button Unit	AT
453	CGIDM0158GE01		Drum Base Ass'y	AN	2-5	QSW-Z0321TAZZ		Menu/Gamma Switch Unit	AK
454	NROLM0046GEZZ		Guide Roller Ass'y	AM	2-6	RUNTK0342TAZZ		RS232C Unit	AL
455	NROLM0045GEZZ		T Roller Ass'y	AK	2-7	VSP0020P-A18E		Speaker Unit	AL
456	NDAIV1076GEZZ		S Reel Base Ass'y	AM	2-8	PCOV09070TAZZ		Wire Cover	AC
457	NDAIV1077GEZZ		Tu Reel Base Ass'y	AK	3-1	CLNSV0008TA01		V/F Lens Unit	AM
458	MLEVF0526GEZZ		Pinch Lever Ass'y	AP	3-2	GCOVA1596TAKA		V/F Cover UP(PD3AS/AH)	AN
459	NBLTT0016GEZZ		Drive Belt	AD	3-2	GCOVA1596TAKB		V/F Cover UP(PD3AE)	AN
461	RMOTM1080GEZZ		L Motor Ass'y	AQ	3-3	GCOVA1597TAKA		V/F Cover Low(PD3AS/AH)	AN
462	RMOTV1023GEZZ		Capstan Motor	AY	3-3	GCOVA1597TAKB		V/F Cover Low(PD3AE)	AN
463	QSW-R0039GEZZ		Mode SW	AE	3-4	GCOVD1006TAZZ		V/F LCD Protection Cover	AH
470	DDRMV0069GE02		Drum Ass'y	BZ	3-5	GCOVH1240TAZZ		V/F LCD Back Cover	AD
500	RAMP-0033TAN1		Head Amp PWB Unit	—	3-6	GCOVH1242TAZZ		V/F Front Cover Unit	AM
501	PSLDM3338TAFW		H/A FPC Shield Plate	AC	3-7	GCOVH7067TA00		Eye Cap	AF
CASSETTE CONTROL PARTS					3-8	JKNBZ0072TASA		Visibility Control Button	AD
600	CHLDX3080GE08		Cassette Control Ass'y	AY	3-9	KLMPV0042TAZZ		V/F Back Light	BB
601	LHLDX3080GEZZ		Housing Ass'y	AW	3-10	LANGK0443TAZZ		V/F Tilt Unit	AW
604	CLEVF0524GE01		Top Cover Ass'y	AT	3-11	LANGK0452TAZZ		V/F Slide Angle Unit	AV
606	LANGF9647GEZZ		Side Board Ass'y	AG	3-12	LHLDZ1497TAZZ		V/F LCD Invertor Holder	AD
607	MSPRB0001GEFJ		UP-Spring	AD	3-13	MSPRP0192TAFW		Visibility Control Plate	AB
608	LX-HZ3089GEFF		S Tight Screw M1.4 x L2	AA				Spring	
609	PDMP-0016GEZZ		Damper	AE	3-14	PSPAG0122TAZZ		V/F LCD Spacer	AD
610	TLABH0556GEZZ		Cassette Control Caution	AD	3-15	PSPAZ0271TAZZ		V/F Angle Sheet	AC
			Label		3-16	PSPAZ0272TAZZ		V/F Shade Sheet	AA
611	TLABH0557GEZZ		Cassette Control Lock	AD	3-17	PSPAZ0273TAZZ		V/F FPC Sheet	AB
			Label		3-18	RLCDV0046TAZZ		V/F LCD	BP
614	ZTAPEZ211004M		FPC Shield Tape	AB	3-19	PSPAG0123TAZZ		V/F Back Light Spacer	AD
617	PGIDM0160GEZZ		Cassette Lid Guide L	AC	3-20	PSPAZ0266TAZZ		V/F Invertor Holder Sheet	AA
618	PGIDM0161GEZZ		Cassette Lid Guide R	AC	4	CCABE6042TAK4		K.S. LCD Cabinet	AW
								(PD3AS/AH)	
					4	CCABE6042TAK5		K.S. LCD Cabinet(PD3AE)	
					4-2	HBDGB0053TASA		SHARP Badge	AF
					4-3	JBTN-0301TASA		LCD Lock Lever	AD
					4-4	LANGK0464TAFW		Plate Nut	AD
					4-6	MSPRD0061TAFJ		LCD Lock Spring	AC
					4-7	PSHEP0107TAZZ		Shade Sheet	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
4-8	PZETV0403TAZZ		Insulate Tape	AA	27-2	DUNTK2964PM04		MAIN2 PWB Unit (PD3AEX)	—
5	DCOVA1601TAK3		K.S. Front Cover (PD3AS/AH)	BB	27-3	DUNTK2966QA01		POWER2 PWB Unit	—
5	DCOVA1601TAK4		K.S. Front Cover(PD3AE)	BA	28	DUNTK2875QA04		LCD PWB Unit	—
5-1-2	GCOVA1590TAZZ		R/C Catch Light Cover	AD	29	GCOVA1599TAKA		Top Side Cover (PD3AS/AH)	AP
5-1-3	PFLT-0026TAZZ		Microphone Spacer	AC	29	GCOVA1599TAKB		Top Side Cover(PD3AE)	AP
5-1-4	HDECA0701TASA		Microphone Grille (PD3AS/AH)	AP	30	GDAi-3056TASA		Button Cover	AQ
5-1-4	HDECA0701TASB		Microphone Grille(PD3AE)	AP	31	KLMPV0041TAZZ	▲	Lamp	AU
5-1-5	HiNDP0207TASA		Terminal Plate	AD	32	LANGF0345TAFW		Tilt Under Angle	AD
5-1-6	GCOVA1708TAKA		Terminal Cover (PD3AS/AH)	AH	33	PGIDM0036TAZZ		Light Guide Plate	AG
5-1-6	GCOVA1708TAKB		Terminal Cover(PD3AE)	AH	34	PMiR-0031TAZZ		Reflection Sheet	AD
5-1-7	HBDGB0061TASA		SHARP Badge	AG	35	PSHEP0108TAZZ		Prism Sheet	AF
5-1-8	HiNDP0203TASA		Lens Plate	AD	36	PSHEP0110TAZZ		Radiation Sheet	AD
5-1-9	LHLDZ1493TAZZ		Terminal Cover Belt	AE	37	PSHEP0111TAZZ		Wide-Angle Sheet	AD
5-1-10	GCOVA3068TASA		Lens Hood	AN	38	PSHEP0112TAZZ		DBEF Sheet	AL
5-1-11	PFLT-0027TAZZ		Microphone Grille Felt	AA	39	CANGK0442TA01		LCD Tilt Ass'y(PD3AS/AH)	BB
5-1-12	QEARP0253TAZZ		Front Cover Earth Sheet	AB	39	CANGK0442TA02		LCD Tilt Ass'y(PD3AE)	BB
5-2	PMLT-0177TAZZ		Microphone Sound Insulation Sheet	AC	39-1	GCOVA1594TAKA		FPC Cover(PD3AS/AH)	AG
5-3	LHLDZ1491TAZZ		Microphone Holder Front	AD	39-1	GCOVA1594TAKB		FPC Cover(PD3AE)	AG
5-4	LHLDZ1492TAZZ		Microphone Holder Rear	AD	39-2	GCOVA1595TAKA		Tilt Cover(PD3AS/AH)	AG
5-5	RMiCC0083TAZZ		Microphone Unit	AR	39-2	GCOVA1595TAKB		Tilt Cover(PD3AE)	AG
5-6	PMLT-0176TAZZ		Microphone Molt	AB	39-4	PSHEP0120TAZZ		Protection Sheet	AC
5-9	PMLT-0179TAZZ		Microphone Grille Molt	AB	39-5	QPBWB2882TAZZ		LCD Tilt FPC	AS
5-10	QEARP0253TAZZ		Front Cover Earth Sheet B	AD	39-6	QSW-Z0308TAZZ		Turn Switch Unit	AG
6-1	DCOVA1600TAK1		K.S. Battery Cover Service	AZ	39-7	PSHEP0122TAZZ		Tilt Shade Sheet	AC
6-1-2	HiNDP0208TASA		Battery Plate	AD	40	CANGK0449TA01		K.S. LCD S/C Front	AG
6-1-3	JBTN-0302TASA		S/S Button	AH	40-2	PZETV0406TAZZ		LCD Panel Insulate Sheet	AC
6-1-4	JBTN-0303TASA		Still Button	AG	41	CANGK0450TA01		K.S. LCD S/C Rear	AL
6-1-5	JBTN-0304TASA		Power Lock Button	AD	41-2	PSHEP0106TAZZ		LCD Spacer	AF
6-1-6	JKNBP0175TASA		Battery Lock Pinch	AE	41-3	PTPEH0034TAZZ		Double-Faced Tape	AC
6-1-7	JKNBP0174TASA		Power Lock Pinch	AG	42	RLCDV0062TAZZ		LCD Unit	BX
6-1-8	LHLDZ1494TAZZ		Power Lock Button Holder	AD	44	DUNTK2965QA01		Camera Head PWB Unit	—
6-1-9	LHLDZ1498TAZZ		Battery Lock Pinch Holder	AD	45	PSHEP0118TAZZ		Shade Sheet A	AA
6-1-10	MLEVP0041TASA		Battery Lock	AD	46	PSHEP0119TAZZ		Shade Sheet B	AA
6-1-11	MSPRC0121TAFJ		Battery Lock Spring	AB	A	LX-HZ0050TAFF		Screw M1.7x4 (Black)	AA
6-1-12	MSPRC0122TAFJ		Power Lock Spring	AB	B	LX-HZ0050TAFN		Screw M1.7x4 (Silver)	AA
6-1-13	PSHEP0113TAZZ		Battery Guide Hole	AC	C	XiPSF17P04000		Screw M1.7x4 (Black)	AA
6-2	LANGK0472TAFW		Cover U	AE	D	XiPSF17P03000		Screw M1.7x3 (Black)	AA
6-3	QSW-Z0312TAZZ		Cover Fixing Angle	AE	E	XiPSF17P02000		Screw M1.7x2 (Black)	AA
6-4	QTANZ0136TAZZ		Power Switch Unit	AR	F	XiPSN17P04000		Screw M1.7x4 (Silver)	AA
12	RUNTK0371TAZZ		Battery Terminal Unit	AR	G	XiPSN17P03000		Screw M1.7x3 (Silver)	AA
13	RUNTK0343TAZZ		Joint PWB Unit	AS	H	XiPSN17P02000		Screw M1.7x2 (Silver)	AA
22	GCOVA1603TAKA		Remote Control Recieve Unit	AM	I	LX-BZ0232TAFD		Floating Screw B	AB
23-1	CLNSA0135TA04		LCD Front Cover	AQ	J	LX-BZ0220TAFD		Screw M1.7x2 (Chrome)	AB
23-2	JKNBP0172TASA		Lens Unit	BS	K	LX-BZ0221TAFD		Screw M1.7x3 (Chrome)	AB
23-3	LANGK0451TAFW		Jog Pinch	AG	L	LX-HZ0057TAFD		M1.7x5 (Silver) P Tight	AA
23-4	LHLDZ1490TAZZ		Lens Setting Angle	AE	M	LX-BZ0235TAFN		Screw for V/F Cover	AA
24	CCOVH1241TAK3		Jog Switch Holder	AD	N	LX-HZ0071TAFF		Stopper	AB
24	CCOVH1241TAK4		K.S. Adjust Connection Cover(PD3AS/AH)	AH	P	XASSF17P02000		Screw for Visibility Pinch	AB
24-1	TLABH0386TAZZ		K.S. Adjust Connection Cover(PD3AE)	AG	Q	LX-HZ0017TAFF		V/F Tilt Screw	AA
24-2	PSPA02062TAZZ		Lithium Converter Label	AC	R	XiPSN16P05000		LCD Tilt Fixing Screw M2x8 (Black)	AA
25	GCOVH1216TASD		LCD Under Rubber	AA	S	LX-BZ0225TAFF		Screw for DV Terminal M1.6x5 (Silver)	AA
25	GCOVH1216TASC		Lens Cap(PD3AS/AH)	AL	T	LX-BZ0231TAFF		Floating Screw (Black)	AB
26	TLABM2138TAZZ		Lens Cap (PD3AE)	AL	U	LX-HZ0013TAFF		Floating Screw A (Silver)	AB
26	TLABM2139TAZZ		Model Label(PD3AS)	AE				Screw M1.7x6 (Black)	AA
26	TLABM2140TAZZ		Model Label(PD3AH)	AE					
26	TLABM2141TAZZ		Model Label(PD3AE)	AE					
26	TLABM2142TAZZ		Model Label(PD3AEW)	AE					
27-1	DUNTK2963PM01		Model Label(PD3AEX)	AE					
27-1	DUNTK2963PM02		MAIN1 PWB Unit(PD3AS)	—					
27-1	DUNTK2963PM03		MAIN1 PWB Unit(PD3AH)	—					
27-1	DUNTK2963PM04		MAIN1 PWB Unit (PD3AE/AEW)	—					
27-2	DUNTK2964PM01		MAIN1 PWB Unit(PD3AEX)	—					
27-2	DUNTK2964PM02		MAIN2 PWB Unit(PD3AS)	—					
27-2	DUNTK2964PM03		MAIN2 PWB Unit(PD3AH)	—					
27-2	DUNTK2964PM04		MAIN2 PWB Unit (PD3AE/AEW)	—					

Ref. No.	Part No.	★	Description	Code
CAMERA UNIT PARTS LIST				
1	PFILW0076TAZZ		Crystal Filter	AP
2	PCOVM8027TA00		Dust Protection Rubber	AC
3	VHILZ2383SM-1		CCD Sensor	BN
4	LANGK0437TAFW		CCD Cover Panel	AC
5	PSLDM3333TAMS		Shield Case A	AE
6	DUNTK2965QA01		Camera Head PWB Unit	—
7	LX-HZ0073TAFD		Screw	AA
8	XiPSN17P02000		Screw (1.7 x 2)	AA
9	LX-HZ0050TAFD		Screw	AA
10	LHLDZ1490TAZZ		Jog Switch Holder	AD
11	JKNBP0172TASA		Jog Pinch	AG
12	PSLDM3334TAFW		Shield Case	AD

LENS UNIT PARTS				
1	CLNSA0135TA04		Lens Unit	BS
2	90AVEM0641		Zoom Motor U	AU
3	90AXQN16+Cj5		Zoom Motor U Installation Screw	AA

Ref. No.	Part No.	★	Description	Code
SUPPLIED ACCESSORIES				
ACCESSORIES				
⚠	QACCB0016TAZZ		AC Cable(PD3AH)	AV
⚠	QACCK0006TAZZ		AC Cable(PD3AS/AE)	AL
⚠	QACCL0026TAZZ		AC Cable(PD3AEX)	AN
	QCNW-1927TAZZ		AV/S Cable(PD3AE)	AT
	QCNW-1976TAZZ		AV/S Cable (with Ferrite Core(PD3AS/AH/AEX))	AY
	QCNW-1957TAZZ		DC Cable	AT
	RRMCG0080TASA		Remote Control	AR
	TiNSE0154TAZZ		Service Guide(PD3AH)	AA
	TiNSE0380TAZZ		Quick Operation Guide (PD3AH)	AM
	TiNSE0381TAZZ		Operation Manual(PD3AH)	AG
	TiNSL0255TAZZ		Operation Manual (PD3AE/AEX)	AV
	TiNSL0256TAZZ		Operation Manual (PD3AEW)	AV
	TiNSL0253TAZZ		Operation Manual1(PD3AS)	AW
	TiNSL0254TAZZ		Operation Manual2(PD3AS)	AW
	RTPEV0026TAZZ		DV Tape	AY
	UADP-0321TAZZ		AC Adapter	BG
	UBNDS0024TAZZ		Shoulder Strap	AH
	UBATL0011TAZZ		Lithium Battery(x2)	AE
	UBATI0053TAZZ		Battery	BG
	QPLGA0010GEZZ		AC Plug Converter(PD3AE)	AF

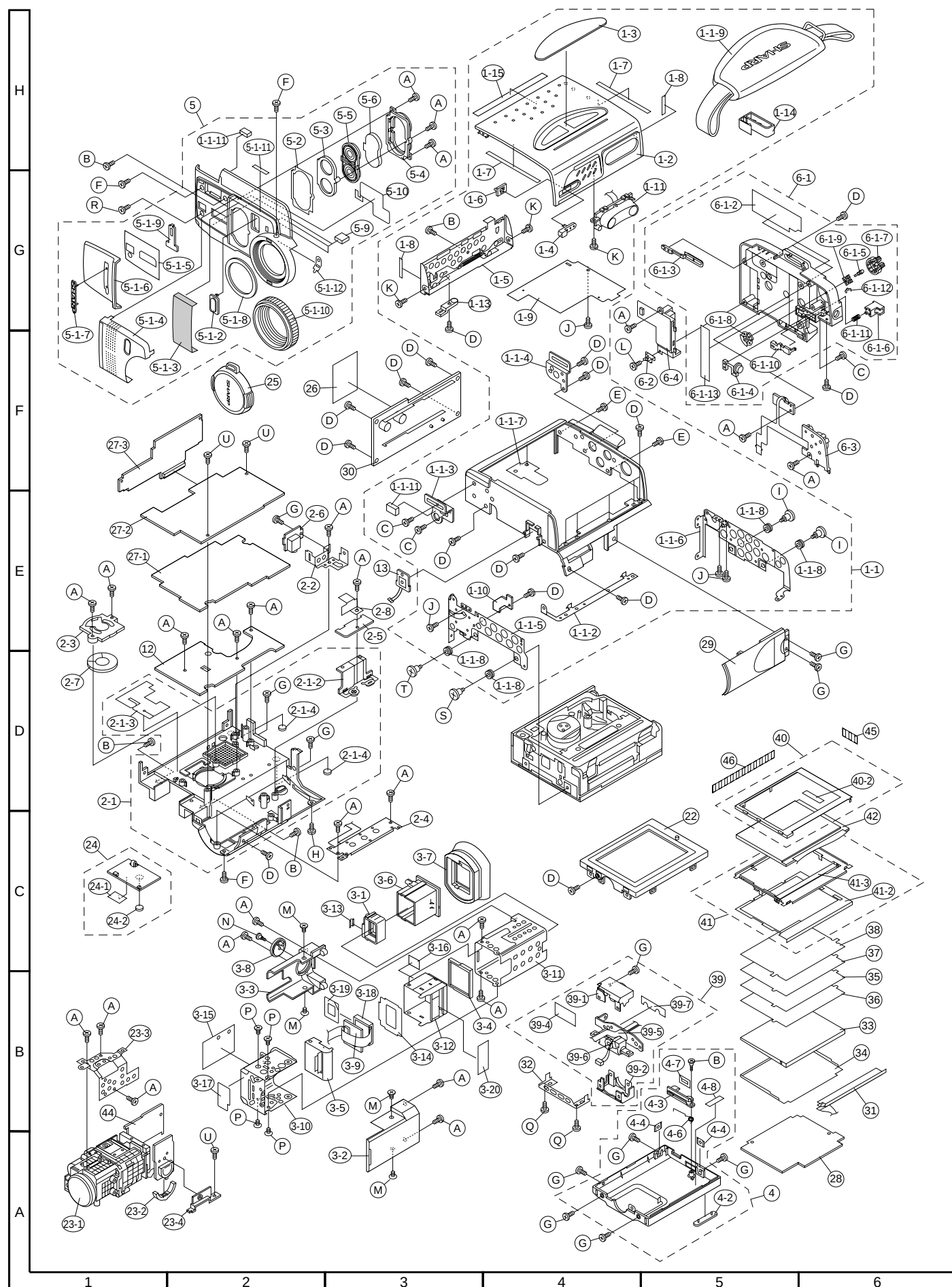
ACCESSORIES			
(NOT REPLACEMENT ITEM)			
TGANE0050TAZZ	Guarantee Card(PD3AEX)	AE	
TGANE0057TAZZ	Guarantee Card(PD3AH)	AG	
TGANL0004TAZZ	Guarantee Card (PD3AS/AH)	AC	
TLABK0001TAZZ	No. Card	—	

PACKING PARTS
(NOT REPLACEMENT ITEM)

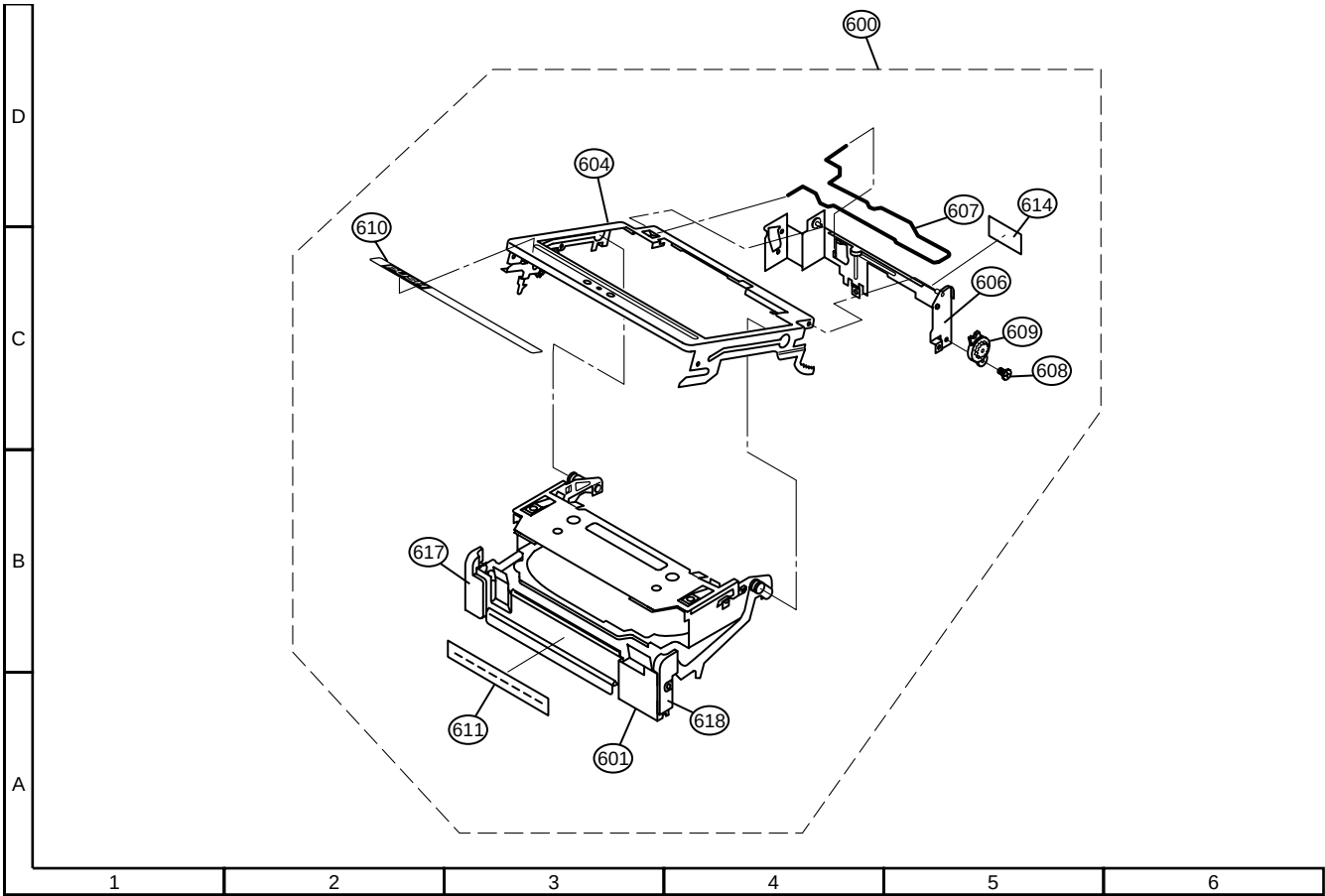
SPAKC7570TAZZ	Packing Case(PD3AS)	—
SPAKC7571TAZZ	Packing Case(PD3AH)	—
SPAKC7572TAZZ	Packing Case(PD3AE/AEX)	—
SPAKC7573TAZZ	Packing Case(PD3AEW)	—
SPAKA6306TAZZ	Packing Top ADD.	—
SPAKA6307TAZZ	Packing Bottom ADD.	—
SPAKA6308TAZZ	Packing	—
SPAKF0262TAZZ	Packing Upper	—
SPAKP6121TAZZ	Wrapping Paper	—
SPAKF0270TAZZ	Adapter Pat	—
SSAKA0087TAZZ	Polyethylene Bag (PD3AH/AE/AEW/AEX)	—
SSAKA0088TAZZ	Polyethylene Bag(PD3AS)	—
SPAKP6108TAZZ	Side Pad	—



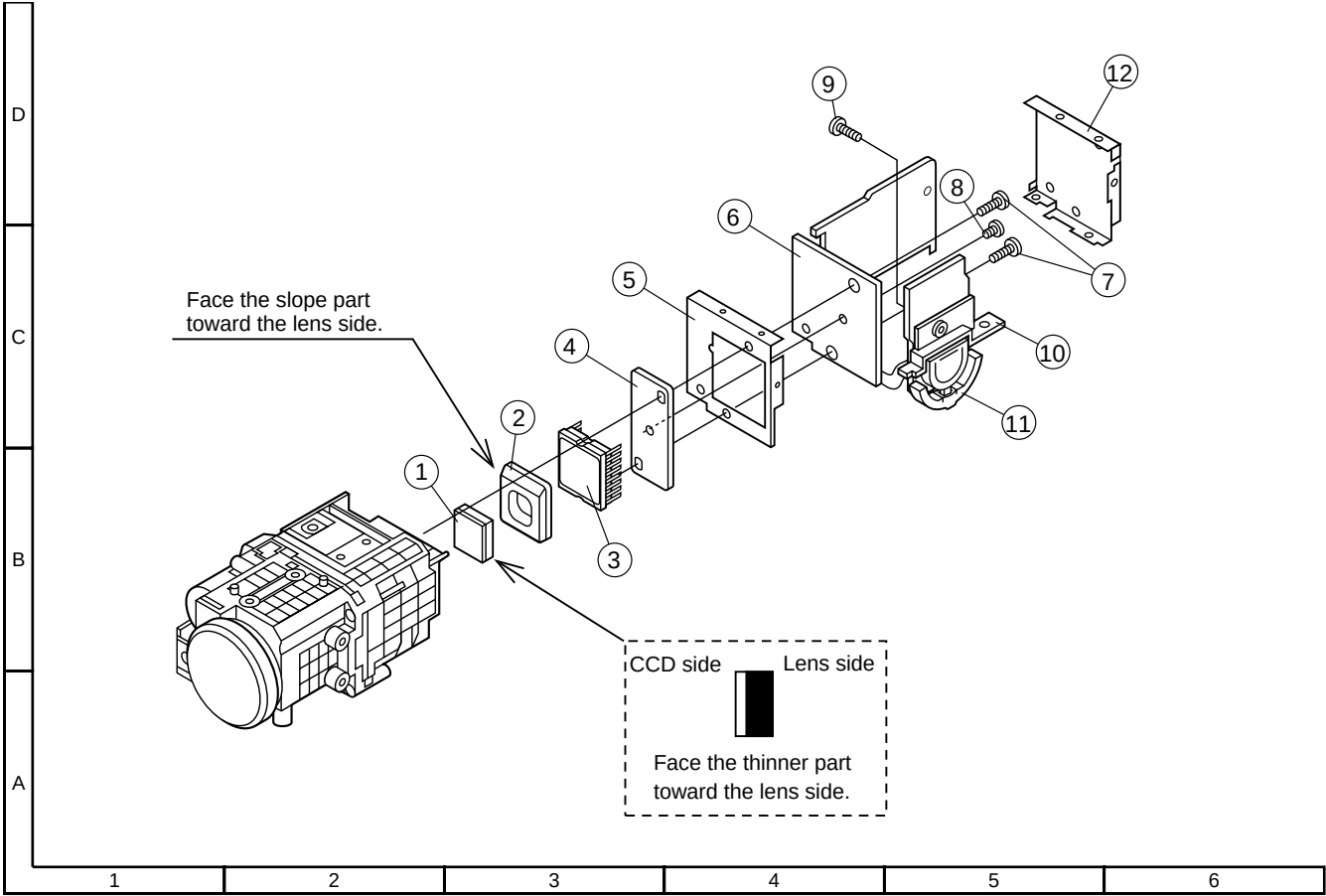
CABINET EXPLODED VIEW



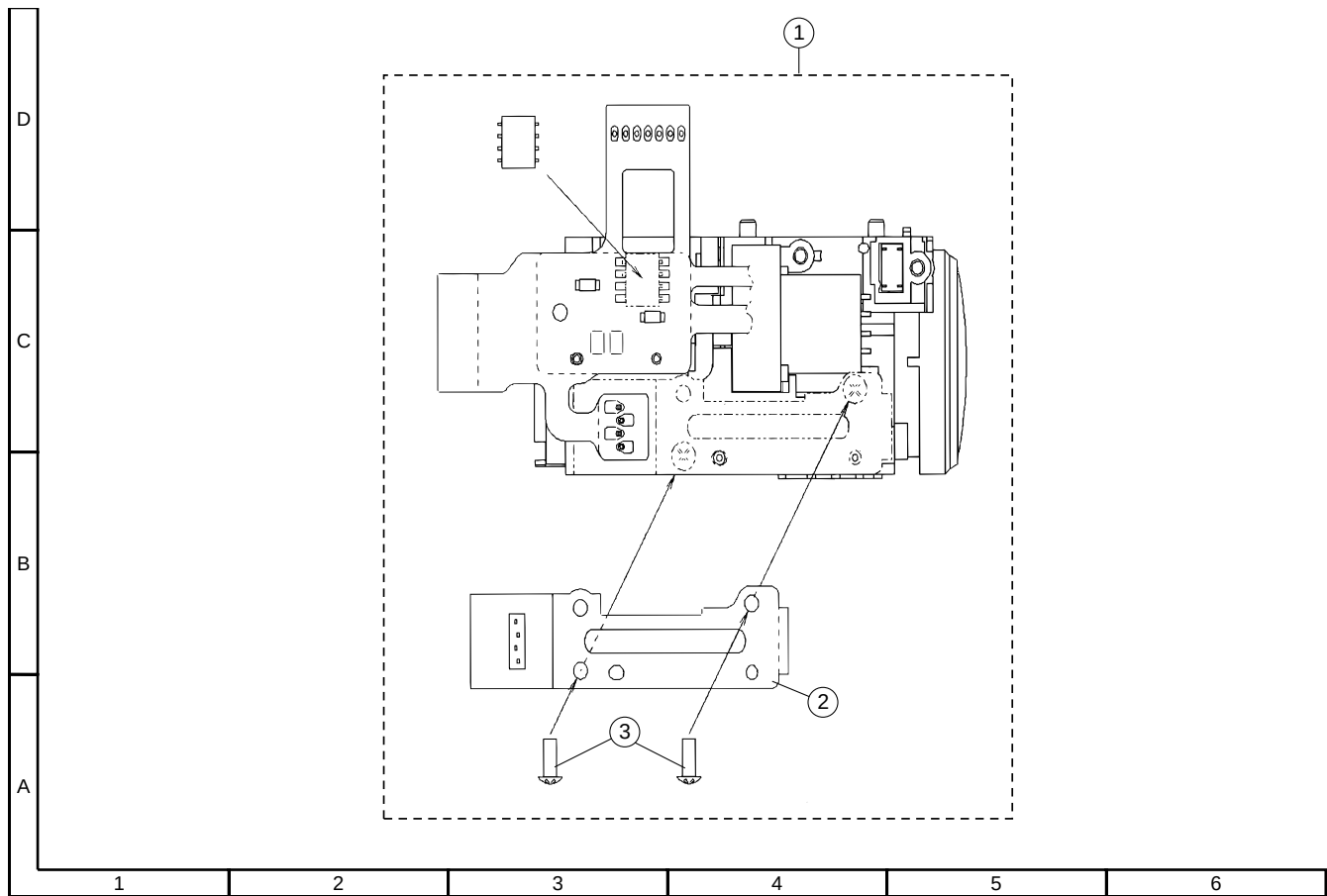
CASSETTE CONTROL EXPLOOD VIEW



CAMERA UNIT EXPLOOD VIEW



LENS UNIT EXPLOOD VIEW



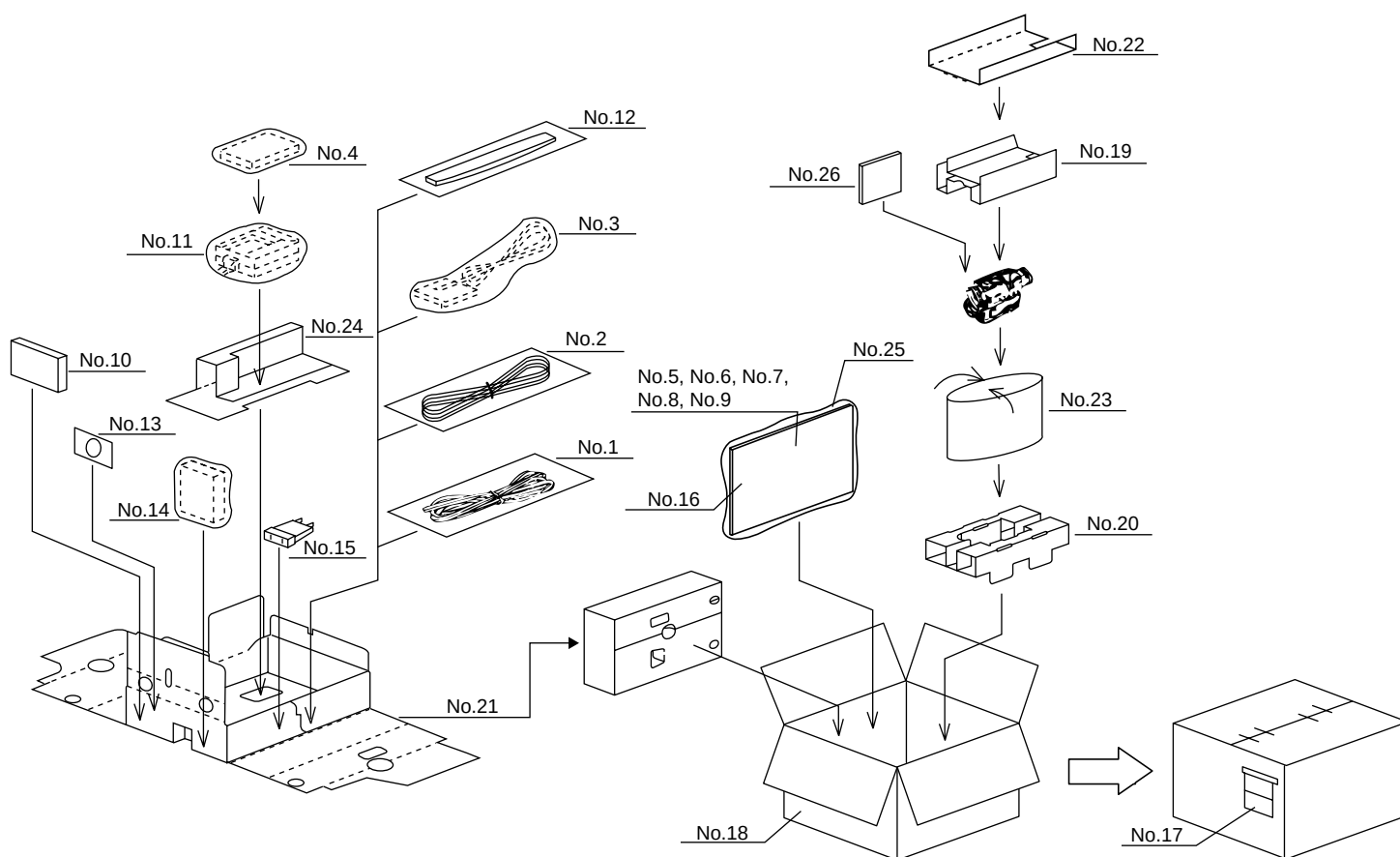
VL-PD3AS/AH/AE SERVICE JIG SPECIFICATIONS**1-1. Adjusting jigs for checking the mechanism**

No.	Name	New part	Type number, Application	Part code	Code
1	PB-use cassette torque meter		1mN·m/15mN·m	9DASD-1015	DB
2	Torque gauge		For use in VS-REW take up torque adjustment	JiGTG0045	CN
3	Torque gauge head		For use with the above torque gauge	9EQTGH-DH5000	BW
4	Tension gauge 4N		For measuring of pinch roller pressure	JiGSG0400	BK
5	Dial tension gauge		PTG-10	9DAPTG-10-10W	CA
6	Torque screwdriver 150mN·m		No. 0 cross bit	JiGTD1500RTDH	CB5
7	Master plane		For checking the reel base height	9EQMP-VLPD1	CL
8	Height adjustment jig		For height adjusting	9DAHG-PD1	BZ
9	Height adjustment screwdriver		For guide roller adjustment. For Tu guide adjustment. For T roller adjustment. Bit shape.	9EQDRIVER-DH5	BC
10	Alignment tape - I		For tape running adjustment	VR3-GAZXS	CF
11	Alignment tape - II		For Switching Point adjustment	VR3-JPZQS	CG
12	For hexagon nut opposite side 3mm bit		For S guide hexagon nut installation.	95CM22001	BL
13	Reel hub for back tension measurement		Refer to Service Manual.	Prepared in the service station.	–
14	String for measuring the pinch roller pressure		Refer to Service Manual.	Prepared in the service station.	–

1-2. Parts for periodical inspection and maintenance

No.	Name	New part	Type number, Application	Part code	Code
1	Oil		Cosumo Hydro HV22	9EQ-OIL-HV22	AE
2	Cleaning paper		Dusper Σ (SIGMA) ozu Co., LTD	JiGDUSPER	AP
3	Grease: Moly Coat YM-103		Dow coaning	99FGREASE-YM103	AH

17. PACKING OF THE SET



ACCESSORIES

No.	Model	Parts Code	Description	Remarks
1	PD3AH	QACCB0016TAZZ	AC Cable	⚠
	PD3AS/AE	QACCK0006TAZZ	AC Cable	⚠
	PD3AEX	QACCL0026TAZZ	AC Cable	⚠
2	PD3AE	QCNW-1927TAZZ	AV/S Cable	
	PD3AS/AH/AEX	QCNW-1976TAZZ	AV/S Cable(with Ferrite Core)	
3	– Common parts –	QCNW-1957TAZZ	DC Cable	
4	– Common parts –	RRMCG0080TASA	Remote Control	
5	PD3AH	TiNSE0154TAZZ	Service Guide	
6	PD3AH	TiNSE0380TAZZ	Quick Operation Guide	
7	PD3AH	TiNSE0381TAZZ	Operation Manual	
	PD3AE/AEX	TiNSL0255TAZZ	Operation Manual	
	PD3AEW	TiNSL0256TAZZ	Operation Manual	
8	PD3AS	TiNSL0253TAZZ	Operation Manual 1	
9	PD3AS	TiNSL0254TAZZ	Operation Manual 2	
10	– Common parts –	RTPEV0026TAZZ	DV Tape	
11	– Common parts –	UADP-0321TAZZ	AC Adapter	⚠
12	– Common parts –	UBNDS0024TAZZ	Shoulder Strap	
13	– Common parts –	UBATL0011TAZZ	Lithium Battery(x2)	
14	– Common parts –	UBATI0053TAZZ	Battery	
15	PD3AE	QPLGA0010GEZZ	AC Plug Converter	

ACCESSORIES (NOT REPLACEMENT ITEM)

No.	Model	Parts Code	Description	Remarks
16	PD3AEX	TGANE0050TAZZ	Guarantee Card	★
	PD3AH	TGANE0057TAZZ	Guarantee Card	★
	PD3AS/AH	TGANL0004TAZZ	Guarantee Card	★
17	– Common parts –	TLABK0001TAZZ	No. Card	★

PACKING PARTS (NOT REPLACEMENT ITEM)

No.	Model	Parts Code	Description	Remarks
18	PD3AS	SPAKC7570TAZZ	Packing Case	★
	PD3AH	SPAKC7571TAZZ	Packing Case	★
	PD3AE/AEX	SPAKC7572TAZZ	Packing Case	★
	PD3AEW	SPAKC7573TAZZ	Packing Case	★
19	– Common parts –	SPAKA6306TAZZ	Packing Top ADD.	★
20	– Common parts –	SPAKA6307TAZZ	Packing Bottom ADD.	★
21	– Common parts –	SPAKA6308TAZZ	Packing	★
22	– Common parts –	SPAKF0262TAZZ	Packing Upper	★
23	– Common parts –	SPAKP6121TAZZ	Wrapping Paper	★
24	– Common parts –	SPAKF0270TAZZ	Adapter Pat	★
25	PD3AH/AE/AEW/AEX	SSAKA0087TAZZ	Polyethylene Bag	★
	PD3AS	SSAKA0088TAZZ	Polyethylene Bag	★
26	– Common parts –	SPAKP6108TAZZ	Side Pad	★

MARK ★ Not Replacement Item

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